



Theory of Change: Facilitator's Guide



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The Technical and Operational Performance Support (TOPS) Program is the USAID/Food for Peace-funded learning mechanism that generates, captures, disseminates, and applies the highest quality information, knowledge, and promising practices in development food assistance programming, to ensure that more communities and households benefit from the U.S. Government's investment in fighting global hunger. Through technical capacity building, a small grants program to fund research, documentation and innovation, and an in-person and online community of practice (the Food Security and Nutrition [FSN] Network), The TOPS Program empowers food security implementers and the donor community to make lasting impact for millions of the world's most vulnerable people.

Led by Save the Children, The TOPS Program draws on the expertise of its consortium partners: CORE Group (knowledge management), Food for the Hungry (social and behavioral change), Mercy Corps (agriculture and natural resource management), and TANGO International (monitoring and evaluation). Save the Children brings its experience and expertise in commodity management, gender, and nutrition and food technology, as well as the management of this 7-year (2010–2017) US\$30 million award.

Disclaimer:

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Contents

Abbreviations and Acronyms.....	i
Acknowledgements.....	ii
Introduction	1
Using This Guide	1
Background Reading	2
We would like your feedback	2
List of Key Terms	3
List of Items Needed	4
Sample Agenda for the 5-Day Training	5
Plenary: Theory of Change Q&A	6
Note to Facilitators	15
Module 1: Overview and Conceptual Frameworks	16
About Module 1	16
Overview	16
Structure and Workload	16
Module 1 Session 1: Overview of Theory of Change	17
Introduction	17
Learning Objectives.....	17
Companion PowerPoint.....	17
Summary of Key Concepts	22
Module 1 Session 2: Using a Conceptual Framework to Inform TOC Data Collection and	
Analysis	23
Introduction	23
Learning Objectives.....	23
Companion PowerPoint.....	23
Companion Handouts and Tools.....	23
Small Group Activity 1.2.....	33
Overview	33
Companion Handouts and Tools.....	33
Works Referenced in Module 1	36
Sources for Data Collection Guidance	37
Resilience Framework.....	38
Module 2: Making the Theory of Change Plausible: Causal Analysis and Problem Trees	39
About Module 2	39
Overview	39
Structure and Workload	39
Module 2 Session 1: Causal Analysis and Problem Trees	39
Introduction	39
Learning Objectives.....	40
Companion PowerPoint.....	40
Companion Handouts and Tools.....	40

Summary of Key Concepts	45
Small Group Activity 2.1.....	46
Introduction	46
Learning Objectives.....	46
Companion Handouts	46
Works Referenced in Module 2	49
Additional resources:	49
Module 3: Making the Theory of Change Plausible: From Problems to Solutions.....	50
About Module 3	50
Overview	50
Structure and Workload	50
Module 3 Session 1: From Problems to Solutions	51
Introduction	51
Learning Objectives.....	51
Companion PowerPoint.....	51
Summary of Key Concepts	55
Small Group Activity 3.1.....	56
Introduction	56
Learning Objectives.....	56
Companion Handout.....	56
Module 3 Session 2: Assumptions and Rationales	58
Introduction	58
Learning Objectives.....	58
Companion PowerPoint.....	58
Summary of Key Concepts	62
Small Group Activity 3.2.....	62
Learning Objectives.....	62
Companion Tool.....	62
Works Referenced in Module 3	63
Module 4: Making the Theory of Change Feasible	64
About Module 4	64
Overview	64
Structure and Workload	64
Module 4 Session 1: Prioritizing Domains of Change	65
Introduction	65
Learning Objectives.....	65
Companion PowerPoint.....	65
Companion Handout.....	65
Small Group Activity 4.1.....	67
Introduction	67
Learning Objectives.....	67
Companion Handout.....	67
Module 4 Session 2: Interventions	68
Introduction	68

Learning Objectives.....	68
Companion PowerPoint.....	68
Companion Handouts and Tools.....	69
Small Group Activity 4.2.....	74
Introduction	74
Learning Objectives.....	74
Companion Handout.....	74
Module 4 Session 3: Refining the TOC.....	75
Introduction	75
Companion PowerPoint.....	75
Companion Handout.....	75
Small Group Activity 4.3.....	76
Introduction	76
Learning Objectives.....	76
Companion Handout.....	76
Works Referenced in Module 4	77
Additional Resources to Guide Intervention Selection.....	77
Module 5: Making the Theory of Change Testable & Using the Theory of Change	78
About Module 5	78
Overview	78
Structure and Workload	78
Module 5 Session 1: Indicators and TOC transfer to Logframe.....	79
Introduction	79
Learning Objectives.....	79
Companion PowerPoint.....	79
Companion Handouts	79
Summary of Key Concepts	84
Small Group Activity 5.1.....	85
Introduction	85
Companion Handouts and Tools.....	85
Works Referenced in Module 5	86
Resources to Guide Indicator Selection.....	86
Module 5 Session 2: Theory of Change Narrative	87
Introduction	87
Learning Objectives.....	87
Companion PowerPoint.....	87
Module 5 Session 3: Using the Theory of Change Throughout the Project Cycle	88
Introduction	88
Learning Objectives.....	88
Companion PowerPoint.....	88
Works Referenced in Module 5	91

Abbreviations and Acronyms

AIDS	acquired immune deficiency syndrome
CBO	community-based organization
CMAM	community-based management of acute malnutrition
DRR	disaster risk reduction
FFP	USAID Office of Food for Peace
GMP	growth monitoring and promotion
HIV	human immunodeficiency virus
IMCI	integrated management of childhood illness
kg	kilogram(s)
km	kilometer(s)
logframe	logistical framework
M&E	monitoring and evaluation
NGO	nongovernmental organization
ORT	oral rehydration therapy
Q&A	question and answer session
TOC	theory of change
UK	United Kingdom

Acknowledgements

The authors would like to thank all the participants in early theory of change workshops (Medellin, Colombia; Washington, DC, USA; and Dhaka, Bangladesh) whose helpful suggestions and insights helped to refine the ideas presented in this facilitator guide.

Introduction

Until recently theories of change were less utilized by the development community compared to logical frameworks (logframes), results frameworks, and other similar planning and evaluation tools. Currently the international development community (practitioners and donors alike) shows great interest in using a theory of change (TOC) as the development hypothesis for projects. Compared to other processes, a TOC requires more in-depth, causal analysis of issues supported by a rigorous and evolving evidence base. Developing and using a TOC is an effective means of building common understanding around the processes needed to achieve desired changes. Additionally, a TOC allows for efficient monitoring, learning, and evaluation based on a clear and testable set of hypotheses.

This curriculum, *Theory of Change: Facilitator's Guide*, contains five modules that explain the process of developing a complete TOC to support program planning, implementation, and monitoring. The main learning objectives for the five-module course are to:

- Become familiar with a step-by-step process, rooted in thorough causal analysis, which can be used to develop a TOC for development programs.
- Understand how a TOC is used in planning, implementing, monitoring, and evaluating development programs throughout the program cycle.

The primary target audience for this course is nongovernmental organization (NGO) staff involved in planning, implementing, monitoring and evaluating development programs, especially programs funded by USAID's Office of Food for Peace (FFP). The widely-circulated 2014 draft has been updated to better align to 2016 FFP guidance for implementers of Development Food Assistance Projects. The course also can be helpful for any stakeholder in the public and private sector who has responsibilities or interests in holistic programming.

Using This Guide

This guide is organized around five modules, each of which can be completed in one 8-hour day, including two 15-minute breaks and an hour for lunch. The modules begin with an overview of the entire process of creating a TOC, progress through all the steps necessary to develop the final product, and culminate with ideas about how to use a TOC throughout the program cycle. The curriculum is crafted based on previous experience in program and TOC development, in addition to participant feedback from previous workshops.

Each module includes an overview of what is covered in that segment. Then, learning objectives, PowerPoint presentations, and handouts and other materials are provided for each presentation and small group activity.¹ The guide follows the corresponding PowerPoint presentations and includes slide numbers and headings so a facilitator can follow along easily. Small group activities are incorporated in the order and place at which they should occur, as

¹ The most current PowerPoint slides and handouts can be found at www.fsnnetwork.org/theory-change-training-curriculum

they generally correspond with a presentation. Every session also has a suggested duration, which can be adapted to your time frame and participants' level of understanding.

As with the agenda, you may adapt any part of this training to fit your needs. If you have a better problem tree or TOC examples or better matrices for organizing information, feel free to incorporate them into your training. If you elect to have participants carry out field work to collect sample data or devote time to background reading, this will only enhance the learning experience.

In addition, we incorporate some facilitation ideas and tips that may help you throughout the training when explaining concepts or helping groups move forward through an activity. These are in green-highlighted text boxes like the one below.

Facilitator: Try to have a facilitator for each small group. Participants often have many questions specific to their group's work, and having a dedicated guide along the way is useful.

Background Reading

We strongly advise that the facilitator of this workshop be well-versed in TOC and program design. However, if the facilitator is not an expert or simply wishes for some additional refresher material and background reading, we recommend the following resources:

- Anderson, A. 2005. The community builder's approach to theory of change: A practical guide to theory development. New York, NY: The Aspen Institute.
- CARE International. 2012. Peacebuilding with impact: Defining theories of change. London: CARE International UK.
- Taplin, D., H. Clark. 2012. Theory of change basics: A primer on theory of change. New York, NY: ActKnowledge.
- Center for Theory of Change. Available at: www.theoryofchange.org
- USAID Bureau of Democracy, Conflict, and Humanitarian Assistance Office of Food for Peace. 2016. Technical Reference for FFP Development Food Assistance Projects. Washington, DC: USAID.
- Recommended excerpt: Chapter II Mandatory Program Design Elements, pages 4-17.
- Vogel, I. 2012. Review of the use of 'Theory of Change' in international development: Review report. London, UK: UK Department of International Development.

We would like your feedback

The TOC is an evolving concept in program design and you will encounter diverse methods for using the process and creating a product. TOCs can be used at the country strategy level, as guidance for organizational change, or as development hypotheses. In this guide and the accompanying materials, we present one method that does its best to align to the requirements

of creating a development hypothesis for FFP Development Food Assistance Projects. However, feel free to adapt and incorporate other ideas that work for your audience into the training.

Similarly, this facilitator guide and the course materials continue to evolve and be refined as we learn more, find better ways of instructing, consult experts, and gain more feedback from workshop participants. If you find holes in the logical flow of the course, or other gaps, we welcome feedback on these materials. Please send your suggestions to laurie@tangointernational.com. Rest assured that we are continually improving and adapting this course.

We wish you good luck in future trainings.

List of Key Terms

Below is a list of key terms used throughout the Theory of Change modules.²

Assumption: Contextual or environmental conditions that are important to the success of a theory of change, but are beyond a project's control. Assumptions are conditions that already exist or have a relatively high likelihood of occurring.

Causal analysis: The process of identifying why various problems exist by developing hierarchical relationship between causes and effects, exploring cross-causal linkages, and identifying feedback loops

Domains of change: The broad conditions that must be met to achieve a long-term goal — also referred to as key leverage points or strategic objectives. As of 2014, FFP began using the term “**purpose**” to describe this concept.

Outcomes: changes that are expected to occur when all necessary and sufficient preconditions are met. Lower-level outcomes are pre-conditions for higher-level outcomes. An outcome is not an action, but rather a state of being.

- **Breakthrough:** An outcome that represents a significant leap forward or advance that is not easily reversed in a pathway of change.

Outputs: The immediate product of project interventions. Outputs are pre-conditions for lower-level outcomes.

Pathway of change: A graphic representation of all incremental outcomes, and the sequence in which they occur, that are required within a domain of change. Also referred to as an impact pathway.

Preconditions: The set of outputs and outcomes necessary to achieve an over-arching goal. An output may be the precondition for a lower-level outcome. A lower-level outcome is a

² Many definitions and different terms exist for the concepts described. Please review the terms and definitions used in this course, noting alignment to any terms preferred by your organization. If your organization prefers and consistently uses another term (for example, impact pathway instead of pathway of change), please feel free to adapt the materials throughout.

precondition of a higher-level outcome. A higher-level outcome is a pre-condition for a domain of change or FFP purpose.

Problem tree: The graphic product that is created through the process of causal analysis.

Problem(s)/cause(s): A condition or set of conditions that negatively affect people and contribute to compromised outcomes. Problems can be and typically are both causes and effects of other conditions. In this course, we distinguish various types and levels of problems/causes, as follows:

- **Overarching problem:** The most significant problem facing a defined population, based on evidence.
- **Key problems:** The broad conditions that contribute to an overarching problem.
- **Underlying (root) cause:** Significant and specific contributors to key problems, which are often the effects of other causes, for example, behaviors, beliefs, knowledge or skill levels, or systemic weaknesses.
- **Contextual conditions:** Social, economic, political, or natural conditions that contribute to underlying causes and often are the result of key problems (i.e., the cycle of vulnerability).

Resilience: A set of capacities that enable households and communities to effectively function in the face of shocks and stressors and still meet a set of well-being outcomes.

Risk: Conditions, both beyond the control of a program and those resulting from project interventions, that may negatively affect a program but that have a relatively low likelihood of occurring.

Sustainable livelihood system: A system in which people have adequate and sustainable access to tangible and intangible resources necessary to meet basic household needs and sustain natural resources for future generations.

List of Items Needed

Participants should bring:

- Laptop computers
- Pens/pencils
- An open mind and willingness to learn

The facilitator/host/venue should provide:³

- Information prior to meeting (e.g., list of things to bring, agenda, meals provided)
- Name tags for participants (with reasonably large font size)

³ Not every workshop will need all listed items. It will depend on the agenda, the meeting space, the number of participants, etc.

- One projector for facilitators with a laser pointer/remote slide advancer
- Two microphones
- Tables arranged to accommodate groups of up to six participants
- Power strips (and electrical outlet) for computers at each table
- Small projectors for group work (one per group); no need for screens if walls in the venue can be used instead
- Flip charts and markers (two flip charts per group table, two in back of room); post-it flip chart paper can reduce the number of pads you actually need
- Highlighters (one per participant)
- Three pads of large sticky notes (with color variety) for each table
- Two medium-tipped black markers per table (it is difficult to get sufficient detail on the sticky notes with fat-tipped markers)
- Several colored markers per table
- Printed handouts for each day
- Printed data sets (minimum of one per every two participants); if possible, send these to participants 1–2 weeks prior to the workshop
- Printed evaluation forms for each day
- USB drive with all training materials
- Access to a printer at the venue

Sample Agenda for the 5-Day Training

The sample agenda on page 7 can be adjusted as needed; however, please consider the following:

- Hands-on activities are the foundation of the workshop and groups need sufficient time to complete them. The time allotted for group work in the agenda may appear very long at first glance, but experience shows that most of the activities require much discussion, critical thinking, and revision. Try not to cut corners here.
- The material is dense, so ensure breaks are sufficient in number and duration. At minimum, schedule one 15-minute break in the morning and one in the afternoon.
- Factor in adequate time for discussion and questions during small group presentations, gallery walks, and plenary. Much of the learning takes place as groups compare their experiences with the process. On the flip side, strong time management skills are needed (e.g., the ability to cut off good discussion by engaged participants so the process can move forward).
- Schedule 5 minutes once or twice a day for an energizer activity.

Plenary: Theory of Change Q&A

In the middle of each day it is recommended that the facilitator provide participants with an opportunity for a brief and casual question-and-answer (Q&A) session on the TOC process.

Some example questions may include:

- How is everyone's experience with the process so far? Is it "clicking?" What is still confusing?
- Is this a process and tool you can envision yourself using to design projects?
- Are there any concerns with the process or products created up to this point?
- At this point, do you feel you could replicate the process with your own dataset?

Sample Theory of Change Workshop Agenda

[LOCATION]

[DATES]

Facilitators: [NAME(S) AND ORGANIZATION(S)]

[Date and Day]

Day 1 – Theory of Change (TOC) Overview, Conceptual Frameworks

Time	Topic	Handouts
8:30–9:00 am	<i>Registration and coffee</i>	
9:00–9:20 am	<ul style="list-style-type: none"> Welcome and participant introductions General overview and structure of workshop 	Agenda
9:20–9:50 am	Presentation 1.1: Overview of Theory of Change Session objectives: <ul style="list-style-type: none"> To provide a general overview of the TOC process and the resulting product. To briefly review the different materials used in this workshop: printed handouts, tools on USB, PowerPoints on USB. 	
9:50–10:00 am	Plenary: questions, answers, participant expectations for workshop	
10:00–10:30 am	Presentation 1.2: Using a conceptual framework to inform data collection and analysis Session objectives: <ul style="list-style-type: none"> To demonstrate how a conceptual framework can be used as a tool for informing TOC development and program design. To share basic steps that can help practitioners interpret and analyze data. 	<ul style="list-style-type: none"> Handout 1.2a Resilience framework Handout 1.2c Key questions Datasets
10:30–10:45 am	Small Group Activity 1.2 <ul style="list-style-type: none"> Introduce raw data sets that will provide content for all analysis carried out in this workshop. Introduce key questions for analysis. 	On USB: <ul style="list-style-type: none"> Tool 1.2a data synthesis Tool 1.2b trend analysis Tool 1.2c asset inventory Tool 1.2d opps & constraints Tool 1.2e stakeholder template
10:45–11:00	<i>Break</i>	
11:00 am –	Small Group Activity 1.2	Instructions for Activity 1.2

Time	Topic	Handouts
12:00 pm	<ul style="list-style-type: none"> Groups begin to review and analyze data to answer key questions. Start to document data gaps. 	
12:00–1:00 pm	<i>Lunch</i>	
1:00–1:15 pm	Plenary: Q&A about process	
1:15–2:00 pm	Small Group Activity 1.2 (continued) <ul style="list-style-type: none"> Continue to review and analyze raw data to answer key questions. Develop PowerPoint presentation to share preliminary analysis in plenary. 	
3:00–3:15 pm	<i>Break</i>	
3:15–4:00 pm	Small Group Activity 1.2 (continued) Finalize presentations	
4:00–4:45 pm	Plenary discussion: Two groups present preliminary analysis (10 minute presentation; 10 minutes for questions and discussion)	
4:45–5:00 pm	Wrap up/feedback/daily evaluation	

[Date and Day]

Day 2 – Making the TOC Plausible: Causal Analysis and Problem Trees

Time	Topic	Handouts
9:00–9:15 am	<ul style="list-style-type: none"> Brief plenary: Participant questions, answers, observations about Day 1 process. Overview of Day 2. 	
9:15–9:40 am	Presentation: Causal Analysis and Problem Trees Session objectives: <ul style="list-style-type: none"> To explain the concept of causal analysis and how it is used to create a problem tree. To practice identifying strong and weak causal linkages 	<ul style="list-style-type: none"> Handout 2.1a problem tree Handout 2.1b causal stream examples Handout 2.1c 2 page problem tree
9:40–10:15 am	Plenary discussion: Critique sample problem trees on a large screen	
10:15–10:30 am	<i>Break</i>	On USB: <ul style="list-style-type: none"> Tool 2.1a causal matrix
10:30 am – 12:00	Small Group Activity 2.1	Instructions for Activity 2.1

Time	Topic	Handouts
pm	<ul style="list-style-type: none"> • Draft an overarching problem statement; identify key problems. • Begin causal analysis noting data gaps. 	
12:00–1:00 pm	<i>Lunch</i>	
1:00–1:15 pm	Plenary: Q&A about process	
1:15–3:00 pm	Small Group Activity 2.1 (continued) <ul style="list-style-type: none"> • Continue to check logic. • Check the balance between systemic, knowledge-related, and behavioral constraints. • Complete problem tree and begin to capture it in the electronic format. 	
3:00–3:15 pm	<i>Break</i>	
3:15–3:45 pm	Plenary: Gallery walk of problem trees; critical peer review and feedback	
3:45–4:45 pm	Small Group Activity 2.1 (continued) <ul style="list-style-type: none"> • Refine problem tree based on feedback. • Capture changes in electronic format. 	
4:45–5:00 pm	Wrap-up/feedback/daily evaluation	

[Date and Day]

Day 3 – Making the TOC Plausible: From Problems to Solutions

Time	Topic	Handouts
9:00–9:15 am	<ul style="list-style-type: none"> • Brief plenary: Participant questions, answers, observations about Day 2 process. • Overview of Day 3. 	
9:15–9:45 am	<p>Presentation 3.1: From Problems to Solutions</p> <p>Session objectives:</p> <ul style="list-style-type: none"> • To illustrate the transition from problem trees to solution trees (with goals and domains of change). • To explain how to identify non-linear pathways of change. • To demonstrate how to link pathways of change across pages in a diagram. • To describe the importance of refining pathways of change to include only essential outcomes. 	
9:45–10:30 am	<p>Small Group Activity 3.1</p> <ul style="list-style-type: none"> • Create solution trees by restating problems as solutions. • Identify pathways of change. 	Instructions for Activity 3.1
10:30–10:45 am	<i>Break</i>	
10:45 am – 12:00 pm	<p>Small Group Activity 3.1 (continued)</p> <ul style="list-style-type: none"> • Check causal linkage between each step in the pathways of change. • Check the balance between systemic, knowledge-related, and behavioral changes. • Continue to document evidence gaps • Distill all pathways of change to essential outcomes. 	
12:00–1:00 pm	<i>Lunch</i>	
1:00–1:15 pm	Plenary: Q&A about process	
1:15 – 2:15 pm	<p>Small Group Activity 3.1 (continued)</p> <ul style="list-style-type: none"> • Identify breakthroughs. • Continue to distill all pathways of change to essential outcomes. 	
2:15–2:45 pm	<p>Presentation 3.2: Assumptions and Rationales</p> <p>Session objectives:</p> <ul style="list-style-type: none"> • To demonstrate how assumptions underpin causal linkages and rationales help to explain causal 	On USB: Tool 3.2 Assumption Rationale matrix

Time	Topic	Handouts
	<p>linkages.</p> <ul style="list-style-type: none"> • To emphasize the necessity of an evidence base to support assumptions. • To demonstrate how to insert Assumptions and Rationales in the TOC model. 	
2:45–3:00 pm	<p>Small Group Activity 3.2</p> <ul style="list-style-type: none"> • Identify assumptions and insert into TOC diagram. • Note the evidence base that supports assumptions in a complementary matrix. • Articulate rationales and insert into TOC diagram. 	Instructions for Activity 3.2
3:00–3:15 pm	<i>Break</i>	
3:15–4:45 pm	<p>Small Group Activity 3.2 (continued)</p> <ul style="list-style-type: none"> • Identify assumptions and insert into TOC diagram. • Note the evidence base that supports assumptions in a complementary matrix. • Articulate rationales and insert into TOC diagram. 	
4:45–5:00 pm	Wrap-up/feedback/daily evaluation	

[Date and Day]

Day 4 – Making the TOC Feasible

Time	Topic	Handouts
9:00–9:15 am	<ul style="list-style-type: none"> Brief plenary: Participant questions, answers, and observations about Day 3 process. Overview of Day 4. 	
9:15–9:30 am	Presentation 4.1: Prioritize Domains of Change Session objectives: <ul style="list-style-type: none"> To share sample selection criteria for prioritizing the domains of change and specific outcomes that a project will address. To demonstrate how to document outcome responsibilities of various actors in the TOC diagram. 	Handout 4.1 Prioritize Domains of Change
9:30–10:30 am	Small Group Activity 4.1 <ul style="list-style-type: none"> Select the domains of change that the project will address and provide your rationale for selection. Change the shape/color of outcomes that will be addressed by other actors in your TOC diagram. Discuss implications for project achievement if other stakeholders do not make progress on an outcome as anticipated. 	Instructions for Activity 4.1
10:30–10:45 am	<i>Break</i>	
10:45 am – 12:00 pm	Small Group Activity 4.1 (continued) <ul style="list-style-type: none"> Finalize TOC graphic highlighting what the project will and will not address. 	
12:00–1:00 pm	<i>Lunch</i>	
1:00–1:15 pm	Plenary: Q&A about process	
1:15–2:00 pm	Plenary discussion: Two groups describe the process they used to prioritize the domains of change and outcomes their project will address, including: <ul style="list-style-type: none"> A description of challenges that surfaced and how they were dealt with. A brainstorm about challenges and solutions related to tracking progress in domains of change that the project will not be directly addressing. Gallery walk: All groups share TOC model, showing the distinction between outcomes the project and other stakeholders will produce.	

Time	Topic	Handouts
2:00–2:20 pm	Presentation: 4.2 Interventions Session objectives: <ul style="list-style-type: none"> To explain how to identify “entry points” for intervention. To highlight that proposed interventions must have a clear and logical link to at least one outcome presented in the TOC. To discuss criteria for selecting interventions. To demonstrate how to insert intervention outputs in the TOC diagram. 	Handout 4.2a Critical questions for interventions
2:20–3:00 pm	Small Group Activity 4.2 Begin to identify interventions for “entry-point outcomes,” list assumptions and risks related to each intervention.	Instructions for Activity 4.2 On USB: Tool 4.2 Outcomes Intervention template
3:00–3:15 pm	<i>Break</i>	
3:15–3:45 pm	Small Group Activity 4.2, continued Continue to identify interventions for “entry-point outcomes,” list assumptions and risks related to each intervention.	Instructions for Activity 4.2
3:45–4:00 pm	Presentation: 4.3 Refine the TOC Session objectives: To offer tips on making a TOC diagram more legible.	
4:00–4:45 pm	Small Group Activity 4.3 <ul style="list-style-type: none"> Improve readability of TOC diagram. Develop a key for all color and shape coding. 	Instructions for Activity 4.3
4:45–5:00 pm	Wrap-up/feedback/daily evaluation	

[Date and Day]

Day 5 – Making the TOC Testable: Using the Theory of Change

Time	Topic	Handouts
9:00–9:15 am	<ul style="list-style-type: none"> Brief plenary: participant questions, answers, observations about Day 4 process Overview of Day 5 	
9:15–9:45 am	Presentation and Plenary Discussion: 5.1 Indicators and logframe Session objectives:	Handout 5.1a_Indicators On USB:

Time	Topic	Handouts
	<ul style="list-style-type: none"> To share criteria that will help to identify effective indicators for each incremental outcome To explain how a TOC can be transferred to an M&E logframe 	<ul style="list-style-type: none"> Handout 5.1b What are indicators? Handout 5.1c USAID TIPS performance indicators Handout 5.1d USAID FFP baseline final indicators Handout 5.1e USAID FFP annual monitoring indicators
9:45-10:30	Small Group Activity 5.1 <ul style="list-style-type: none"> Number outcomes in TOC using logframe format Transfer TOC to logframe Select indicators for each component in TOC 	Instructions for Activity 5.1 On USB: <ul style="list-style-type: none"> Tool 5.1 Logframe
10:30–10:45 am	<i>Break</i>	
10:45am–12:00 pm	Small Group Activity 5.1 , continued <ul style="list-style-type: none"> Number outcomes in TOC using logframe format Transfer TOC to logframe Select indicators for each component in TOC 	Instructions for Activity 5.1
12:00–1:00 pm	<i>Lunch</i>	
1:00–1:15 pm	Plenary: Q&A about process	
1:15 – 1:45 pm	Plenary discussion: Two groups present complete theories of change and logframes	
1:45 -2:00 pm	Presentation 5.2: Theory of Change Narrative	
2:00 -2:30 pm	Presentation 5.3: Using Theory of Change: Session objective: to explore how the TOC will be used at various stages in the program cycle	
2:30–3:00 pm	Plenary discussion: Using a theory of change <ul style="list-style-type: none"> How do you plan to use the TOC process in your daily work? 	
3:00–3:30 pm	Final discussion and workshop evaluation	

Note to Facilitators

Although three options are presented below to allow for flexibility with available time, we highly recommend devoting 5 or more days to the curriculum, rather than fewer days. A 5-day workshop barely offers enough time to understand the process of creating a TOC, how to use the final product, and how to refine it periodically; fewer than 5 days will compromise the learning-by-doing pedagogy embodied in the TOC training, which past participants state helps to comprehend the TOC process.

If available time does not allow for the full 5-day curriculum, shorter trainings are still likely to engender significant discussion from workshop participants. You will have to decide which sessions to drop. Some suggestions from our experience facilitating this training are in the table below.

Breakdown of Training Modules per Number of Available Training Days

If you have...		
1 day or less	3 days	5 days or more
Add depth to the overview (Presentation 1.1), drawing detail from subsequent sessions. Incorporate group discussion, expert Q&A, and evaluation of existing TOCs as time allows.	<p>This is a challenging time frame because you have to balance going into detail with fitting the training into a shorter time span.</p> <p>Day1: Sessions 1.1-2.1</p> <p>Skip Group Activity 1.2. Instead, provide participants with a preliminary problem analysis from which they can construct a problem tree (Activity 2.1). Refining causal analysis skills is the most highly valued aspect of past trainings, so devote 4–5 hours to this task.</p> <p>Day 2: Sessions 3.1-4.1.</p> <p>In Session 3.1, provide participants with pre-made, logic-checked problem trees that they can convert to a TOC.</p> <p>Present Session 3.2, but skip the group activity.</p> <p>Carry out Session 4.1 in full.</p> <p>Day 3: Sessions 4.2-5.1.</p> <p>Present Sessions 4.2 and 4.3, but skip the group activities.</p> <p>Carry out Session 5.2 in full.</p>	<p>Proceed through the complete curriculum.</p> <p>If you have more than 5 days, expand group work time, especially during Activity 2.1 & 3.1, and add more discussion or Q&A time.</p>

Module 1: Overview and Conceptual Frameworks

About Module 1

Overview

The purpose of Module 1 is to provide a basic overview of theories of change and to give participants hands-on practice in using a conceptual framework as tool for planning data collection, and as an analytical tool to organize collected data.

Facilitator: The modules in this training use a resilience framework as the conceptual model to guide problem analysis. However, any holistic conceptual framework (e.g., sustainable livelihoods, food security, etc.) can be applied to these activities.

The objectives of Module 1 objectives are:

- To provide a general overview of the theory of change (TOC) process and the resulting product.
- To demonstrate how a conceptual framework can be used as a tool for informing TOC development and project design.
- To share tools that can help practitioners interpret and analyze data.
- To introduce raw datasets that will provide content for the remainder of the workshop.

Structure and Workload

Module 1 is composed of:

- Facilitator-led presentations on two topics:
 - 1.1: Overview of theory of change.
 - 1.2: Using a conceptual framework to inform data collection and analysis.
- 3 hours of hands-on preliminary data analysis using excerpts from actual quantitative and qualitative data sets.
- Q&A with facilitators at various critical check-in points.
- A few group presentations in plenary at end of day.

Module 1 Session 1: Overview of Theory of Change

Introduction

This session introduces the basic concepts and processes involved in a TOC: the what, how, and why. It gives participants a quick synopsis of the entire process that will be introduced and applied during the five workshop modules.



Estimated duration: 30 minutes

Learning Objectives

Session 1.1 will help participants:

- Gain a general understanding of the process we will use in this workshop to create a TOC graphic.
- Begin thinking critically on how a TOC can be used to more effectively to design, implement, monitor, and evaluate programs.

Companion PowerPoint

A PowerPoint presentation—1.1 Overview of Theory of Change—accompanies this lesson as a separate file.⁴

Slides

Slide 2–3: What is a Theory of Change?

The TOC is both a process and a product:

- The **process** comes from thinking about a situation, recognizing the underlying causes of the situation, determining the long-term change we want to see, and working through the steps to achieve that change. The process includes regularly revisiting the TOC throughout the program cycle.
- The **product** is the graphic or flowchart that is produced from this process, the set of indicators that tell us how success will be recognized at each step in the pathways of change, and the TOC narrative that communicates information that is not easily interpreted from the TOC conceptual graphic.

Slide 4: Why do we need a Theory of Change?

Facilitator: This slide includes animation. Before displaying the text of the slide, ask participants, “Why do we need a Theory of Change?” The slide contains several possible uses for the TOC.

⁴ The most current PowerPoint slides and handouts can be found at www.fsnnetwork.org/theory-change-training-curriculum

A TOC provides benefits at multiple levels and has many potential uses. For example, it helps build common understanding of issues. A TOC can also explicitly state how activities and outputs help to achieve outcomes. Additionally, a TOC may highlight gaps and help us identify appropriate stakeholders and partners, and can clearly show pathways of change.

Slides 5–23: The Theory of Change Process

Facilitator: This set of slides outlines each step of the TOC process that participants will follow during the course of this workshop.

Slides 7–23 offer detail on each of these steps. **Stress to participants the need to constantly revisit steps as they gain more information.**

Highlighting how the workshop agenda aligns to the various steps in the TOC process can be helpful.

Slide 6: The TOC Process

This list of steps will be used as a road map throughout the training so that participants can continually be reminded of where they are in the process. Shaded text indicates a step in the process for which there is not sufficient time in a 5-day workshop to carry out.

Slides 7–8: Comprehensive Data Collection and Analysis

A strong evidence base sets the TOC process apart from other processes. Comprehensive data collection and analysis allows practitioners to identify context-specific problems, rather than simply relying on generic analyses of the problems of the poor. Ongoing data collection and analysis helps practitioners fill data gaps to more accurately determine the causal links between problems.

A key component of comprehensive analysis for any project design is a stakeholders' analysis. This piece becomes even more important in the TOC process as theories of change are not limited to the work of one organization or consortium. Stakeholder analyses should be ongoing through the life of the project to understand shifts in the relative interests and influences of various stakeholders.

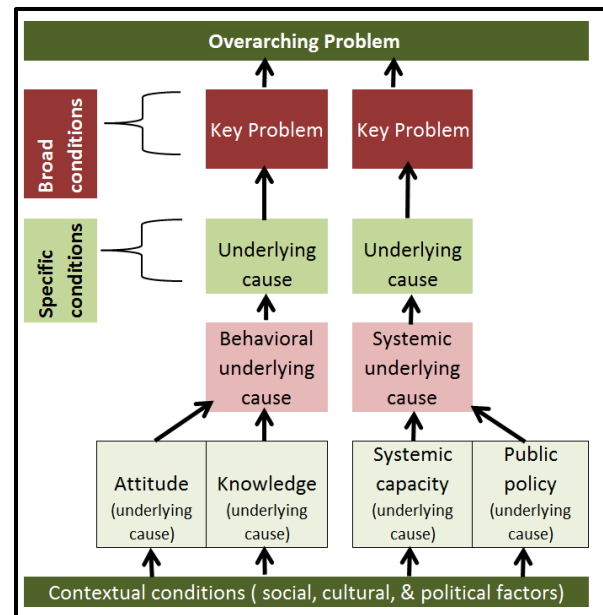
Slides 9–11: Causal Analysis and Problem Trees

Slide 9 gives an overview of causal analysis, which is the backbone of the TOC.

The process of mapping causal streams allows us to construct a problem tree—a diagram that shows how problematic conditions are linked. Starting with the major problem and the problem statement, program planners should continually ask what the causes are of that problem based on the data analysis. In the TOC process, we do not limit ourselves to problems we perceive to be within the scope of the project. It is important to list all types of problems and to track data gaps as they surface.

Slide 10 highlights four levels of problems:

- **Overarching problem:** The most significant problem facing a defined population.
- **Key problems:** Broad conditions that affects people in a negative way.
- **Underlying/root causes:** Major causes of key problems that are often the effects of other causes and must be identified during the synthesis stage of design.
- **Contextual conditions:** General social, political, and environmental conditions that contribute to underlying causes and, at times, result from the key problems.



The key problems will form the top of the problem tree, the underlying/root causes are placed in the middle of the tree, and contextual conditions will generally feed in from the bottom.

Slide 11 provides more detail on underlying/root causes. Underlying causes come in myriad forms: practices and behaviors, knowledge and skill levels, beliefs, attitudes, and systemic conditions. It is critical to think about all of them during causal analysis.

Slide 12: Sample Excerpt from a Problem Tree

Determining the causal linkages between problems allows us to organize these conditions into a problem tree and begin to see the hierarchical cause-and-effect flow and cross-causal linkages. This is a crucial preliminary step for identifying domains and pathways of change.

Facilitator: Presenting a large, complex graphic such as this often results in font sizes that are too small for participants to read. Be aware of this, and consider including these types of graphics as separate handouts or direct participants to digital versions so that they can follow along.

Slides 13–14: Solution Tree

The next step is to restate all problem statements in terms of desired change. Be sure to state the project goal as if it has already been achieved (e.g., Increased food security...), rather than in the future tense (e.g., Household food security will increase).

Note that the key problems transform into domains of change or FFP purposes—the main areas where changes must occur if the overarching goal is to be reached.

Slides 15–16: Pathways of Change

We map pathways of change by starting with a domain of change and tracing all the step-by-step solutions that lead to it. This often results in cross-sectoral linkages, a key strength of theories of change compared to results frameworks or other logistical frameworks.

Slide 17: Identify Assumptions and Articulate Rationales

The next step in the process involves identifying assumptions and articulating rationales. There is a wide range of interpretation about what constitutes an assumption in a TOC. Because this course is primarily designed for implementers of FFP Development Food Assistance Projects, we use FFP's definition. Assumptions are conditions that are beyond the control of the program, but will likely affect the success of reaching various levels of preconditions, and could affect the overall success of the theory of change. Assumptions are conditions that are already in place that you do not expect to change during the life of the program. Developing a thorough TOC requires identifying assumptions along all pathways of change. Assumptions should be supported by evidence, strengthening the case to be made about the plausibility of theory and the likelihood that stated goals will be accomplished.

Rationales are a relatively new addition that are required in the TOC graphics for FFP Development Food Assistance Projects. Rationales differ from assumptions in that they are not conditions that are in place, but rather explanations and evidence that show why the causal logic in a theory of change is plausible. We don't have to include a rationale for every step in the pathway of change—only include rationales if there is concern that the causal logic in your TOC model may not be obvious to all users.

Slide 18: Prioritize Outcomes and Domains of Change that the Project Will Address

Because a TOC depicts a broad view of what needs to change in a given context in order to reach the overarching goal, pathways and domains of change should not be limited only to those changes that one organization or project can stimulate. We need to constantly think about other actors (public, private, local, national, international, etc.) who may contribute to achieving the goal. Sometimes this means that other actors will tackle an entire pathway to a domain of change; sometimes it means that other actors will simply be responsible for several outcomes along a pathway of change.

Slides 19–20: Identify Intervention Outputs for TOC Outcomes

Slide 19: The next step is to think about the best interventions that will help us to achieve the intended goal. What can be done to start the TOC wheels in motion?

We do not need to have an intervention output for every single outcome presented in the model. Starting at the bottom of the TOC model helps to identify lower-level outcomes or “actionable outcomes,” pre-conditions that, if realized, will lead to the outcomes above them.

Slide 20: This stage of the process also helps us to prioritize interventions. Practitioners often want to carry out every possible activity that could be of some help to people. The reality is that budget, staffing, and temporal constraints do not allow for everything to be done effectively. By

using specific criteria, we can determine which interventions are necessary and sufficient to achieve TOC outcomes. This will contribute to more efficient and effective programming.

Slide 21: Identify Indicators

Indicators in a TOC tell us how success will be recognized at each step in a pathway of change. A complete TOC should have indicators for all outcomes and outputs, not only the outcomes that a particular organization decides to address directly.

Slide 22: Transfer TOC to logframe

If you are developing the TOC for a FFP-funded project, you will need to transfer it to your monitoring and evaluation logframe. This is the last step in the TOC process that we will carry out in this workshop. This slide displays USAID's Office of FFP guidance on the relationship between the TOC and the logframe.

Select appropriate responses based on:

- **a thorough review of necessary and sufficient outcomes.**
- **a thorough analysis of assumptions.**
- **an opportunity analysis** – what's already working? What capacities are in place?
- **the comparative advantage of your organization/consortium.**
- **the interest and influence of relevant stakeholders.**

Slide 23: Draft the TOC narrative

We won't draft a TOC narrative in this workshop, but it is a critical component of the TOC process. The narrative allows you to communicate information that is not easily interpreted from the TOC conceptual graphic. It is a place to share references to evidence that supports causal logic, to identify external stakeholders that are responsible for outcomes in the TOC, and to explain project assumptions.

Slides 24–26: The TOC Product

The next set of slides gives an overview of all the elements that make up the conceptual graphic for a TOC: the product. The TOC product has three elements: 1) a conceptual graphic that articulates the goal, domains of change, outcomes, assumptions, rationales, and key outputs, and shows clear pathways of change; 2) indicators for every component of the TOC; and, 3) the TOC narrative.

Slide 27: How do we know if the TOC adequate?

When the model is plausible, feasible, and testable it generally can be considered adequate. Remember, a unique aspect of a TOC is that it can and should be modified -- as we learn more about the operational context and conduct formative research during project implementation, there will be room for further improvement.

- **Plausible:** It can be explained logically and follows a clear flow from the interventions that will spark change to the long-term goal.
- **Feasible:** It identifies realistic means of initiating change (intervention outputs).
- **Testable:** It clearly outlines how change will be measured each step of the way.

Slide 28: A Complete TOC Model Provides:

- A visual representation of the expected change and how it will occur based on a clear and testable set of hypotheses.
- A communication tool to gain agreement among stakeholders about what defines success and what it takes to achieve it.
- A monitoring and learning tool to understand what factors may be impeding expected change.
- A blueprint for evaluation that identifies measurable indicators of success.

Slide 29-30: Key Differences between Results Frameworks and TOC

There seems to be a lot of confusion about the difference between a TOC and a results framework. Some people claim that they are one in the same. In this course, we argue that results frameworks, at least to the extent that they have been designed and used within the development community for the past decade or so, are very different from theories of change. Several of the reasons are listed on the slides 29-30.

Key Differences: Results Frameworks and TOC

A TOC is developed using:

- Backwards mapping
- Rigorous causal analysis supported by evidence base
- Rigorous attention to underlying assumptions

TOC is not limited to those changes that we will directly address through programming

TOC helps to prioritize optimal sequencing of interventions.

A TOC can and should be revised periodically!

Facilitator: Slide 30 is animated to highlight that a very important difference between the two graphics is that theories of change can AND SHOULD be revised periodically as organizations learn more about their operational context. Results frameworks, on the other hand, are rarely revised.


Summary of Key Concepts

- A rigorous and comprehensive TOC *process* is the key contributor to developing a quality TOC *product*.
- The ongoing multi-step process begins with comprehensive data collection, includes in-depth causal analysis, and requires that significant attention be focused on assumptions. **Steps are consistently revisited as new information surfaces.**
- A TOC is not limited to what one organization or project can do. It is a comprehensive process and product that should be used as a communication tool to gain agreement among stakeholders.

Module 1 Session 2: Using a Conceptual Framework to Inform TOC Data Collection and Analysis

Introduction

This session introduces a resilience approach as a means for understanding factors that influence well-being at the household and community levels.

 **Estimated time: 30 minutes**

The small group activity portion of this session asks participants to identify context-specific problems, strengths, and capacities by comparing the livelihood portfolios of various groups, examining the quality of assets available to different groups, and exploring household and institutional trends. This type of analysis informs TOC development as we will see in Module 2.

Learning Objectives

Session 1.2 will help participants:

- Understand how a conceptual framework can be used as a tool for informing data collection and analysis necessary for TOC development and program design.
- Recognize conceptual issues related to resilience and livelihoods analysis.
- Become familiar with some basic steps that can help practitioners interpret data.
- Practice using the resilience framework to organize information in the sample data sets.

Companion PowerPoint

A PowerPoint presentation—1.2 Conceptual Frameworks—accompanies this lesson as a separate file.⁵

Companion Handouts and Tools

- Handout 1.2a Resilience Framework
- Instructions for small group work 1.2
- Datasets

The following tools are located on participants' USB drives. They will be used in the small group exercise that follows this presentation.

- Tool 1.2a data synthesis
- Tool 1.2b trend analysis
- Tool 1.2c asset inventory

⁵ The most current PowerPoint slides and handouts can be found at www.fsnnetwork.org/theory-change-training-curriculum.

- Tool 1.2d opps & constraints
- Tool 1.2e stakeholder template

Slides

Slide 2: The TOC Process

The TOC roadmap appears in every session to orient participants on where they are in the workshop process.

Slide 3: Purpose of Conceptual Frameworks

A conceptual framework is an analytical tool used to make conceptual distinctions and organize ideas. Strong conceptual frameworks capture real factors and processes in an abstract way that is intuitive and easy to apply. Conceptual frameworks are particularly useful as organizing devices in data collection and analysis.

Slide 4: Conceptual Frameworks and Theories of Change

Frameworks such as a resilience framework or the sustainable livelihoods framework promote comprehensive data collection and holistic problem analysis necessary to inform the development of a TOC. They help us to ensure we are collecting the right kind of information that will allow us to carry out rigorous causal analysis.

Slides 5–22: Components of the Resilience Framework

In this workshop, we use the resilience framework as the organizing structure to assess each of the factors that influence well-being at the household and community levels. This set of slides provided details on the individual components of the resilience framework.

Slide 6: Resilience is viewed as a set of **capacities** that enable households and communities to effectively function in the face of shocks and stressors and still meet a set of well-being outcomes.

Facilitator: Ask participants for their interpretation of resilience before clicking forward on slide 6. On slide 7, ask participants to follow along with Handout 1.2a as you briefly review the Resilience framework (copy included at the end of this module). There is no need to go into detail on the components presented in Slide 7 as details will be discussed in subsequent slides.

Slide 7: The framework integrates a *livelihoods approach*, a *disaster risk reduction (DRR) approach*, and elements of a *climate change approach* to address the underlying causes of vulnerability:

- The livelihoods approach emphasizes the importance of access to diverse assets, institutional structures and processes, and the livelihood strategies pursued by households.

- The DRR approach focuses on preparedness, response, and recovery activities formulated in response to potential shocks and stressors.
- The climate change adaptation approach is similar to that of DRR, but focuses specifically on actions to be taken in response to and preparation for ongoing changes in climate. It gives careful consideration to potential threats caused by the loss of biodiversity and a decrease in ecosystem services.⁶

Slide 8: A holistic resilience analysis begins with an understanding of the context in which a particular group or population is situated. Contextual factors include a variety of social, economic, political, environmental, demographic, historical, and infrastructural conditions that influence the range of livelihood strategies households are able to pursue. Positive and negative trends are contextual factors. For example, economies can improve or decline, environments can become degraded or can be restored, and long-term weather patterns can change. Contextual factors also include natural hazards and man-made shocks that threaten lives and livelihood systems.

Collecting and understanding data related to the context helps to accurately target strategies that support positive, or counteract negative, conditions.

Slide 9: Level of aggregation is the unit of analysis for determining resilience of what or whom (the individual, household, community, institution, government, or ecosystem). The relationship between various levels is a nested hierarchy (i.e., resilient individuals and households are the foundation for resilient communities). It is critical to note that resilience at one level does not automatically result in resilience at higher levels: resilient households do not necessarily result in resilient communities and vice versa; a resilient community does not guarantee that all households within it are uniformly resilient.

When you are planning data collection to inform a TOC, make sure tools are designed to capture information that will help you analyze the root of problems at various levels—individuals, households, communities, and systems.

Slide 10: Resilient to what?

Facilitator: Before clicking forward on Slide 10 ask participants to provide ideas of what households and communities should be resilient to.

Stating that households or communities are resilient is not sufficient. We must be clear about what households and communities are resilient *to*. “Shocks and stressors” is the most common generic descriptor used, but what does that term include?

To design plausible theories of change and effective development programs, it is critical that we collect data that help us understand precisely which types of shocks and stressors are impacting populations.

⁶ Frankenberger, T., T. Spangler, M. Langworthy, and S. Nelson. 2012.

Shocks and hazards are events that cause physical damage, cause economic loss, and/or threaten human life and well-being. The term “hazard” is sometimes reserved for natural/physical occurrences (such as earthquakes, flooding, landslides, etc.). The term “shock” is generic and comprises more than physical hazards; events of social, economic, or biological origin, such as conflict or a pandemic, also are included in the definition.

The difference between a shock and a stressor is that a shock typically has an immediate impact (quick onset), while the onset of a stressor is more gradual (slow onset). Stressors include trends such as climate change, drought, global economic volatility, or natural resource depletion. In areas of chronic poverty, for example, an increase in food prices can push vulnerable populations past a tipping point and result in crisis.

Facilitator: Ask participants to refer to Handout 1.2a, the resilience framework, noting the placement of the context and shocks and stressors component.

Exposure for households and communities is a function of the magnitude, frequency, and duration of shocks.

Slide 11: Households have access to both **tangible and intangible assets**⁷ that allow them to meet their needs. Absorptive, adaptive, and transformative resilience capacities are dependent on a sustainable combination of livelihood assets. Some assets are prerequisites to others. The following examples demonstrate how human capital (knowledge) might enable individuals to effectively use or realize other livelihood assets.

Educated adults (human capital) may be able to better manage financial capital. Literate individuals may have better leverage to realize political capital.

Livelihood assets are things you own, have a claim to, or have steady access to. They may be tangible or intangible. Alternative terms include capital, resources, or capabilities.

Additionally, tradeoffs exist between each form of household livelihood capital. For instance, investment in education to increase human capital may put a significant strain on limited household income (financial capital). Access to and use of each of these resources is subject to change and exhibits identifiable trends over the long term. In all cases, the most vulnerable households are those that cannot effectively cope with shocks and stressors because they lack access to adequate livelihood assets. *Understanding which assets males and females have access to, and the quality of those assets, is critical to informing TOC development.*

Slides 12–15: Six Basic Assets

Facilitator: For each type of capital, ask for examples before showing text on the slide. On slide 14 discuss bonding, bridging, and linking social capital.

⁷ In this course we use the term “assets” when we refer to the collective group of livelihood assets; we use the term “capital” when we refer to a singular livelihood asset (e.g., social capital).

In a resilience framework, six forms of capital commonly comprise the portfolio of livelihood assets. The following table provides a brief description of each.

Table 1: Forms of Capital that Influence Resilience to Shocks and Stressors

Human capital	The stock of competencies (e.g., skills, intelligence, ability to labor, or individual health and nutritional status) that enable households to put all other forms of livelihood capital to best use.
Financial capital	Cash and other items that can be converted to cash quickly and easily (e.g., wage income, savings, credit, remittances, pensions, unemployment payments, or gold).
Natural capital	Natural resource stocks that provide useful resource flows (e.g., land, streams, trees, soil, pastureland, sea, wildlife, biodiversity, climate, or rainfall).
Physical capital	Basic infrastructure (e.g., transportation, road systems, markets, housing/shelter, energy, communications, or water systems), productive assets (animals, tools, or equipment), and other material means that enable people to maintain and enhance their relative level of wealth.
Social capital	Social resources (e.g., networks, family/extended family structures, membership in groups, labor-sharing systems, social relations, ties to tribes, or access to wider institutions in society) upon which people draw in pursuit of livelihoods. The quality of the networks is determined by the level of trust and shared norms that exist between network members. Being connected to one another helps people living in a community collectively manage their risk.
Political capital	This can include: <ul style="list-style-type: none"> • Agency and relationships of power. • Access to the political system and governmental processes at local and higher levels and the capacity to influence decision-making, to advocate for resources or change, and claim one's rights.

Slide 16: Structures and Processes

To design plausible theories of change and effective development programs, it is essential that we collect data that help us understand the multiple institutions and organizations that directly influence individual, household, and community well-being outcomes. In the public sector, this typically includes national, regional, and local governments as bodies or structures that manage and implement political, judicial, and legislative processes. In civil society, examples of typical structures are nongovernmental organizations (NGOs), community-based organizations (CBOs), religious institutions, and trade associations. There also may be structures within the private or commercial sector.

These structures organize and regulate community behavior and processes, such as through creating and enforcing policy and legislation or through setting and maintaining social and

cultural norms or power relations. They shape and influence people's values and behavior, affecting what they do and how they do it.

Important interactions exist between structures and processes within the context of the rules and social norms in which they exist. The different structures and patterns of collaboration among institutions and among individuals or communities can have positive or negative effects on local livelihood systems. For example, individuals or communities with many assets may be able to change some of the rules (i.e., how different assets can be used, who has access to specific assets).

Looking forward, as you draft a TOC it will be essential that your analysis take these interactions into account.

Slide 17: Livelihood Strategies

A comprehensive resilience analysis to inform a TOC should seek to determine common livelihood strategies pursued by households within a given region, as well as the well-being outcomes that result (food security, educational attainment, health status, etc.).

Livelihood strategies are formed by households in order to reach the outcomes they desire in their lives. Most strategies involve efforts to secure a living and avoid or reduce exposure to risk. For the very poor, livelihood strategies often are focused on negotiating survival. Households form livelihood strategies based on the shocks and other contextual factors they are exposed to, the combination of assets they have, and the overall environment of official and non-official structures and social and legal systems.

A **livelihood strategy** is composed of the plans and actions carried out to secure a living and avoid or reduce exposure to risk.

Livelihood strategies include various types of activities intended to maximize assets, as well as those that aim to reduce risk or cope with shock. **Asset maximizing strategies** include production and income-generating activities (e.g., agricultural production, informal sector employment) or, more often, an evolving combination of multiple activities. They also include actions such as advocating for rights or services, getting married, going to school, or diversifying assets.

Risk reduction strategies are those that help people prepare for and respond to shocks, thereby reducing their vulnerability to the shock and optimally lessening its impact on household well-being (e.g., crop diversification, obtaining insurance, or protecting health). Vulnerable populations use **coping strategies** when they are incapable of meeting basic household needs because of the impact a shock has had on normal livelihood options. Some coping strategies are unsustainable (e.g., selling productive assets, reducing meals), while others are beneficial (e.g., social interdependence, solidarity).

Facilitator: Ask participants to refer to Handout 1.2a and locate the box at the top of the page that notes “Absorptive, adaptive, and transformative capacities.”

As mentioned earlier in this presentation, resilience can be defined as a set of capacities that enable households and communities to effectively function in the face of shocks and stressors and still meet a set of well-being outcomes. The three capacities are:⁸

- **Absorptive capacity:** The ability to minimize exposure to shocks and stresses through preventative measures and appropriate coping strategies to avoid permanent, negative impacts.
- **Adaptive capacity:** The ability to make proactive and informed choices that allow for an effective response to changing environmental, climatic, social, political, and economic conditions.
- **Transformative capacity:** The level to which governance mechanisms, policies and regulations, infrastructure, gender and cultural norms, community networks, collective action, and formal and informal social protection mechanisms constitute an enabling environment for systemic change.

⁸ Bén  , C., R.G. Wood, A. Newsham, and M. Davies. 2012.

Slides 20: Resilience is the Path, Not the Destination

The term “pathways” underscores the idea that both resilience and vulnerability are properly viewed as processes rather than static states. Neither is an outcome, but rather people’s ongoing and fluctuating capacity to absorb, adapt, and transform to the shocks and stressors they face and the context in which they are situated. Households or communities that are able to use their resilience capacities to manage the shocks or stressors they are exposed to and incrementally reduce their vulnerability are less sensitive and are on a resilience pathway. Households that are not able to use their resilience capacities to manage shocks or stressors are sensitive and likely to experience increased vulnerability.⁹

Slide 21: Well-being/Livelihood Outcomes

A household’s level of exposure to risk combined with the resilience capacities a household implements leads to a **well-being outcome** or **livelihood outcome**. There are a variety of well-being outcome measures that provide information on the extent to which households are successfully using resilience capacities to reduce and manage risk in order to reach desired household outcomes.

Well-being Outcomes	
Resilience Pathway	Vulnerability Pathway
<ul style="list-style-type: none">• Food and nutrition security• Health security• Income security• Education security• Environmental security• Habitat security	<ul style="list-style-type: none">• Food insecurity• Malnutrition• Chronic illness• Poverty• Illiteracy• Environmental degradation• Conflict

When collecting data to inform TOC development we must gain a general understanding of well-being outcomes because these measures will be key to determining domains of change in the TOC.

Slide 22: Summary of Part 1 using a Conceptual Framework to Inform the TOC

Slide 22 provides a recap of resilience framework. It can be difficult to know where to start and which data to collect to inform the TOC process. Using a conceptual framework helps to:

- Determine what data we need to collect to rigorously review cross-causal linkages.
- Organize data by key themes to aid interpretation.
- Assess each of the factors that influence well-being outcomes at the community and household levels.
- Identify data gaps.

Slides 23–31: Data Analysis

This next set of slides prepares the participants for the first data analysis activity.

Slide 24: What is data interpretation?

⁹Frankenberger, T., T. Spangler, M. Langworthy, and S. Nelson. 2012.

Interpretation is attaching meaning and significance to the analysis, explaining descriptive patterns, and looking for relationships and linkages among descriptive units.

Dynamic analysis helps to develop theories about the underlying structure of experiences or processes which are evident in the raw data. Descriptive analysis can tell us what but not why. For example, descriptive analysis might report that 45.3% of households state they use proper hand-washing practices or that seven of eight focus groups report that soap is seldom affordable and that washstands are typically located more than 100 meters from a home. Dynamic analysis uses the qualitative and quantitative findings to theorize why the majority of the population is not adopting recommended hand-washing practices. Dynamic analysis focuses on analyzing collected information in order to identify important changes, differences, and trends regarding people's level of risk and prepares you for identifying distinct target populations within the TOC. This is an important skill, not only during the creation of the TOC, but for revising the model throughout the project's life.

Slide 25: Data Interpretation: Several Options to Organize Data

Arranging the data in a manner that allows your team to see what type of information has been gathered is a critical first step. Not only does doing so allow you to see what has been collected, it helps identify gaps in data collection.

Facilitator: This slide presents an overview of the data analysis tools we will explore in the workshop. Ask participants to locate the five tools on their USB and follow along as you provide details on how to use each matrix.

- Tool 1.2a data synthesis
- Tool 1.2b trend analysis
- Tool 1.2c asset inventory
- Tool 1.2d opps & constraints
- Tool 1.2e stakeholder template

Slide 26: Data Synthesis

This matrix synthesizes all collected data into categories that correspond to the resilience framework. Data can be separated by well-being groups (e.g., poor, middle, or better-off), or broken out by sex, occupational categories, urban/rural dwellers, or ethnic groups. This helps identify where strengths and weakness lie that may influence the ability to build and use resilience capacities productively for optimal livelihood outcomes.

Slide 27: Trend Analysis Across Groups

This matrix allows us to compare the portfolios of different groups. Similar to the first matrix, data can be separated by livelihoods groups, well-being groups (e.g., poor, middle, or better-off), sex, urban/rural dwellers, ethnicities, or other distinguishing demographic factors.

It is important to consider factors such as:

- Recent shocks or stressors that have impacted different groups;
- How each group accesses food and money;
- Seasonal variations to access;
- The risk management and coping strategies currently used by each group.

Slide 28: Asset Inventory Across Groups

We have seen how important tangible and intangible assets are to the three resilience capacities. This matrix helps us look at differences between groups for various assets, specifically exploring differences in:

- The quality of each form of capital;
- Who has access to capital;
- Who controls access to capital;
- Strengths, opportunities, needs, and constraints.

Slide 29: Opportunities and Constraints

When creating livelihood portfolios, it is essential that we consider strengths and opportunities, as well as needs and constraints. This becomes particularly important in the design of programs to improve livelihood capacities. If programs are designed solely on an assessment of needs without an understanding of current strengths and capacities, important opportunities for building on existing capacities may be lost.

In the sample matrix in **slide 29**, we have arranged the data to identify an asset portfolio for one livelihood group. For analysis, we would construct a similar matrix for all other groups in our assessment and then compare the portfolios side by side.

Slide 30: Stakeholders' Analysis

To build a case for assistance, we must develop a comprehensive picture of what support exists and what is needed. Stakeholders' templates are a way to track existing activities implemented by national and local government agencies, NGOs, UN agencies, CBOs, etc. It is important to include all types of agencies in the template, even if the project does not anticipate forming partnerships with these agencies. Additionally, it is critical to include all types of activities, even the project partners do not intend to implement similar activities in order to highlight complementarity and collective efforts toward achieving the goal in a theory of change.

Stakeholders' templates typically include:

Name of agency: Be specific. If a government agency, list the specific ministry, not just "government." List the contact/source of information so that if you need to go back and clarify or confirm information you can easily do so.

Type of agency: Government, local NGO, international NGO, UN, CBO, private business, etc.

Scope of assistance: For ‘time,’ identify project lifespan (when implementation began & when it is due to end). Include all phases, not just the current funding cycle. (Example: 2012 – 2017). For ‘geographic,’ list all Districts and/or agro-ecological zones in which activities have been implemented. For ‘beneficiaries,’ when possible, identify specifics (e.g., urban women, children under 5, etc.) and planned total of direct project beneficiaries (exclude indirect beneficiaries).

Successful activities: List activities that have directly contributed to, or are likely to contribute to, achievement of project objectives and/or lasting impacts. As much as possible, describe why these activities were successful.

Relatively unsuccessful interventions: Identify activities that could not be implemented as planned or were not helpful in achieving project objectives. To the extent possible, describe the reasons why these activities were ineffective.

Relationship with other stakeholders: Describe the role of other stakeholders in implementing or monitoring project activities. Identify complementarity and coordination with similar projects implemented by other stakeholders.

Slide 31: Summary

- Conceptual frameworks are particularly useful as organizing devices for determining what data we need to collect to be able to rigorously review cross-causal linkages and for organizing data by key themes to aid interpretation and analysis.
- Comparing the portfolios of different groups enables identification of strengths (capacities) and vulnerabilities of each group and sets the stage for identifying distinct target populations within the TOC.

Small Group Activity 1.2

Overview

In this activity, participants will review the sample dataset that contains qualitative and quantitative findings. Ideally, they will receive the data a week or two before the workshop to allow extra time to become familiar with it.



Estimated duration:

Group activity: 180 minutes

Plenary presentations: 45 minutes

The remainder of the first day should provide sufficient time for small groups to organize and analyze the datasets, to ask questions and receive feedback from the facilitator, and to present their preliminary analysis to the other participants.

Companion Handouts and Tools

The following printed handouts are essential to this lesson.

- Packet of raw datasets (for optimal experience, send these to participants 1–2 weeks before the workshop); data packets should contain a mix of primary data in the form of notes from focus group discussions and key informant interviews, as well as quantitative survey data
- Handout 1.2c Key Questions
- TOOLS 1.2a through 1.2e are located on participants’ USB drives. Participants will use them in the small group exercise that follows this presentation.

Slides and Steps

Facilitator: Divide participants into an appropriate number of small groups. Groups should have no more than eight participants; six works very well. You may ask participants to count off by the number of groups (e.g., if there are 40 participants, count off by five if you want five groups of eight.). Alternatively, you may preordain small groups when participants arrive by presenting name tags or course materials with a number or colored sticker that corresponds with small groups.

Groups should have a mix of participants from different organizations and with different areas of technical expertise, if possible.

After participants are settled into small groups, distribute printed data packets. Remind participants that the data sets are also in a folder on the USB drive. It is quite helpful to have both printed and hard copies. Hard copies can be highlighted; participants can use the “search” function with the soft copies if they are trying to find information on a specific topic.

Slide 33: Small Group Activity 1.2

Review the activity instructions in plenary.

- Designate group members to fill the following roles:
 - One Chief of Party- to make a final decision when the group comes to an impasse.
 - 1-3 note takers for the data entry tools. You may wish to split up data entry responsibilities for the various categories in Tool 1.2a.
 - One data gap documenter.
 - One graphic guru- to create a short PowerPoint summary.
 - One presenter.
- Review the key questions (handout 1.2c) and the data set. Highlight findings in the data set that will help you to answer the key questions.
- Use Tool 1.2a on your USB to organize relevant findings in the data set. You may also use the tools 1.2b-1.2e on the USB to help you organize and analyze the data to answer the key questions.
- Make note of data gaps on a flipchart near the group. You’ll keep adding to this list over the course of the workshop.
- 2-3 groups will prepare a brief PowerPoint presentation to share organized data in plenary. Please keep presentations to 10-12 minutes.

Slides 34–36: Key Questions

The key questions on this set of slides replicate those on Handout 1.2c. These questions are used to guide the preliminary data analysis. They are organized to match the resilience framework and include questions about the context, shocks and stressors, livelihood assets, structures and processes, livelihood strategies, and well-being outcomes. Each point provides a concept for comparing and contrasting households and communities so that participants can develop a comprehensive picture of the data. In addition, using all key questions in combination ensures that the data is analyzed from multiple angles. Depending on how comprehensive the dataset is, it may not be possible to answer all of the key questions. Just as important as identifying what you know is identifying what you do not know. Note all data gaps on a flip chart! This will be critical information when you start to develop your TOC.

Prepare Presentations

Facilitator: Once the analysis begins to take shape, each group should create a PowerPoint presentation that shows their organized data in a logical, clean, and brief way. Stress that each group will have no more than 10 minutes to present. Depending on available time, you may suggest 10 minutes for presentation followed by 10 minutes of questions from the audience.

Periodically remind the groups of the time remaining to finalize their presentations. Ask each group to identify a lead presenter.

Determine and explain to the group how they will share their presentations, either by emailing them to you, saving them to a flash drive to present on your computer, using their own computer to attach to a projector, or some other method.

Plenary: PowerPoint Presentations

Facilitator: Each group should now be prepared to present for 10 minutes. Presentations should include a brief discussion of the organized data and the key questions they were and were not able to answer.

It can be time-efficient and more engaging to select only 2-3 groups to orally present their findings, while all groups keep their slides up on their individual projectors to compare to. Be sure to rotate presenting groups for the next exercise if you elect to not have every group present.

Works Referenced in Module 1

Module 1 content draws heavily from the following modules in a distance learning course created for Florida International University and funded by the U.S. Agency for International Development's Office of Foreign Disaster Assistance (USAID/OFDA):

- Starr, L., S. Nelson, and T. Spangler. 2013. *Livelihoods and Disaster Risk Reduction*. Module 1: Livelihoods and Resilience Assessment. TANGO International and Florida International University. Available at: drr.fiu.edu/courses/livelihoods-drr/
- Starr, L., S. Nelson, and T. Spangler. 2013. *Livelihoods and Disaster Risk Reduction*. Module 2: Livelihood Systems and Risk Assessment. TANGO International and Florida International University. Available at: drr.fiu.edu/courses/livelihoods-drr/
- Starr, L., S. Nelson, and T. Spangler. 2013. *Livelihoods and Disaster Risk Reduction*. Module 3: Program Design. TANGO International and Florida International University. Available at: drr.fiu.edu/courses/livelihoods-drr/

Additional works referenced:

- Béné, C., R.G. Wood, A. Newsham, and M. Davies. 2012. Resilience: New Utopia or New Tyranny? Reflection about the potentials and limits of the concept of resilience in relation to vulnerability reduction programmes. Institute of Development Studies and Centre for Social Protection IDS Working Paper. Vol. 2012 No. 405. *Centre for Social Protection Working Paper No. 006*. Available at: www.ids.ac.uk/files/dmfile/Wp405.pdf
- U.K. Department for International Development. 1999. *Sustainable Livelihoods Framework*. London, UK. Available at: www.eldis.org/vfile/upload/1/document/0901/section2.pdf
- Frankenberger, T., T. Spangler, M. Langworthy, and S. Nelson. 2012. *Enhancing Resilience to Food Security Shocks in Africa*. Department for International Development and TANGO International. Available at: www.fsnnetwork.org/sites/default/files/discussion_paper_usaid_dfid_wb_nov._8_2012.pdf
- World Food Programme. 2009. Comprehensive Food Security and Vulnerability Assessment Guidelines. Available at: www.wfp.org/content/comprehensive-food-security-and-vulnerability-analysis-cfsva-guidelines-first-edition
- CARE USA and TANGO International. 2002. Household Livelihood Security Assessments – A Toolkit for Practitioners. Tucson, Arizona. Available at: pqdl.care.org/Practice/HLS%20Assessment%20-%20A%20Toolkit%20for%20Practitioners.pdf

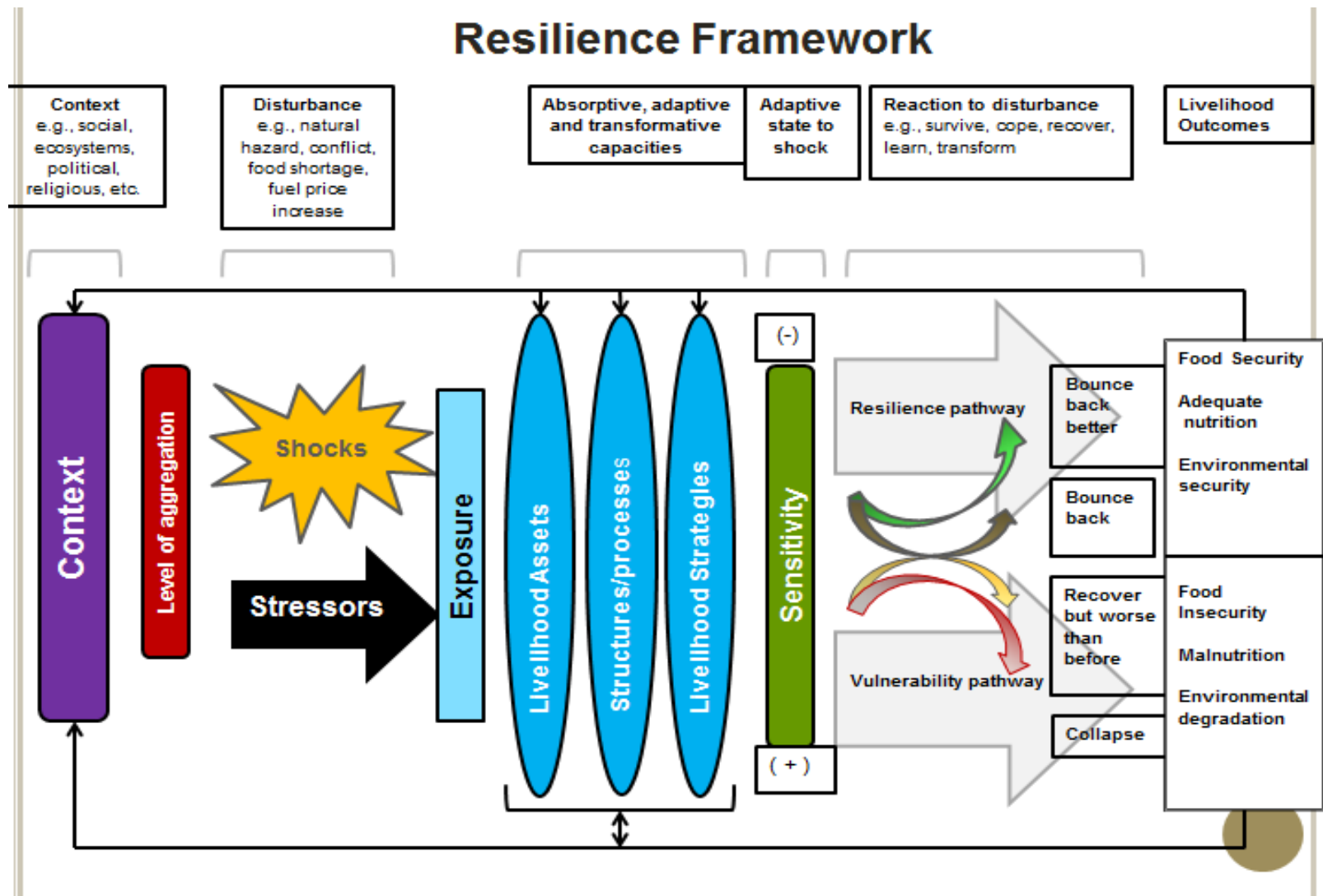
Sources for Data Collection Guidance

- World Food Programme Comprehensive Food Security and Vulnerability Assessment: www.wfp.org/content/comprehensive-food-security-and-vulnerability-analysis-cfsva-guidelines-first-edition
- Wholey, J., H. Hatry, and K. Newcomer (Eds). 2004. *Handbook of practical program evaluation*. San Francisco, CA: Jossey-Bass.

Additional reading:

- International Federation of Red Cross and Red Crescent Societies. 2007. *Global food security assessment guidelines*. Geneva, Switzerland. Available at: www.ifrc.org/Global/global-fsa-guidelines-en.pdf
- Maxwell, S., and T. Frankenberger. 1992. *Household food security: concepts, indicators, measurements. A technical review*. New York and Rome: UNICEF and International Fund for Agriculture Development. (Suggested excerpt: part II, pages 77 to 102.)
- TANGO International. 2004. *Development relief program guidance—Part III, analytical framework, methods, and tools*. Prepared for the U.S. Agency for International Development Bureau for Democracy, Conflict, and Humanitarian Assistance, Office of Food for Peace.

Resilience Framework



Source: Frankenberger, T., T. Spangler, M. Langworthy, and S. Nelson. 2012. *Enhancing Resilience to Food Security Shocks in Africa*. Department for International Development and TANGO International.

Module 2: Making the Theory of Change Plausible: Causal Analysis and Problem Trees

About Module 2

Overview

Module 2 builds on Module 1, which provided an overview of theory of change (TOC), covered resilience concepts, and introduced the dataset that will provide the foundation for the remainder of the training.



Estimated duration:

Presentation: 25 minutes

Plenary critique of problem trees: 35 minutes

Developing a TOC is a multi-step process that begins with having a well-organized, comprehensive picture of the assets, resources, capacities, and needs of a society, community, household, or individual. With this background established in Module 1, we now move on to causal analysis and problem trees, where participants will begin to see the TOC take shape.

The purpose of Module 2 is to set the foundation for a TOC through rigorous causal analysis. This module offers participants plentiful hands-on practice in checking the causal logic of their own problem analyses.

The objectives of Module 2 are to help participants:

- Gain an understanding of causal analysis and problems trees, the process of creating them, and how they contribute to development of a TOC.
- Use organized data from Module 1 to develop a problem tree with strong causal linkages.

Structure and Workload

Module 2 is composed of one facilitator-led presentation on causal analysis and problem trees. The module's specific set of objectives are reinforced using interactive plenary sessions, Q&A with the facilitator, and small group work. The lesson concludes with small group presentations on the day's activities.

Module 2 Session 1: Causal Analysis and Problem Trees

Introduction

This session focuses on using organized data to identify key problems and causes of those problems in a hierarchical flow. Using the preliminary data analysis from Module 1, participants will identify the underlying causes of the broader problems and link them in a causal pathway.

This analysis ultimately leads to the identification of domains of change (FFP purposes) that can bring about more positive outcomes for vulnerable populations, and the preconditions necessary to achieve them.

Learning Objectives

Session 2.1 will help participants:

- Understand the concepts of causal analysis and how it is used to create a problem tree.
- Identify strong and weak causal linkages in sample problem trees.
- Critically analyze and organize problems and causes into a logical flow.
- Draft concise problem statements for all problem levels.

Companion PowerPoint

A PowerPoint presentation—2.1 Causal Analysis and Problem Trees—accompanies this lesson as a separate file.¹⁰

Companion Handouts and Tools

- Instructions for small group work 2.1
- Handout 2.1a simple problem tree
- Handout 2.1b causal stream examples
- Handout 2.1c 2 page problem tree
- TOOL 2.1 causal matrix is located on participants' USB drive. They may elect to use it in the small group exercise that follows this presentation.

Slides

Slide 2-3: Roadmap and Session Objectives

The TOC roadmap appears in every session as a means to orient participants about where they are in the process.

Slides 4-5: Holistic Problem Analysis/Causal Analysis

A **holistic problem analysis** improves our ability to design and implement **integrated** programs that increase resilience. Holistic problem analysis does not necessarily mean bigger, broader programs must be implemented by one organization; it simply means that the team has looked at the “big picture” to identify the most effective response and approach. Understanding the “big picture” is critical to the development of a TOC, because an effective model will portray a holistic picture of how a goal might be reached, including the efforts of other actors.

¹⁰ The most current PowerPoint slides and handouts can be found at www.fsnnetwork.org/theory-change-training-curriculum.

Integrated programming refers to a **non-sectoral** or **cross-sectoral** approach, with sectors and stakeholders working together to address key leverage points and adopting complementary strategies to address common issues. By layering, integrating, and sequencing initiatives we can further the objectives of each to a greater extent than by programming in isolation.

Holistic problem analysis relies on rigorous **causal analysis**, the identification of common constraints and opportunities, feedback loops, and underlying causes of vulnerability before going further in the design process. The process allows program planners to identify the pathways between causes and effects, including **cross-causal linkages** between problems. For example, why might a community experience low income security? Perhaps the causes leading to this problem include negative health issues, low crop production, or any number of other factors that are not directly within a finance and/or economic pathway. Any problem that interacts with one part of a livelihood system also interacts with other parts of the system. Thus, holistic problem analysis always aims to investigate cross-causal linkages.

Once the data have been gathered and organized, vulnerable populations have been identified, and trends have been determined, it is time for causal analysis.

Slide 6: Identify Problems and Underlying Causes

For the purposes of this training, **problems** are a condition or set of conditions that negatively affect people (e.g., death, infectious diseases, poor access to health or extension services, low agricultural production, inadequate housing) and contribute to compromised well-being outcomes. **Key problems** are the broad conditions or causes that contribute to an overarching problem (e.g., low income, poverty, malnutrition). **Underlying (or root) causes** are the entire collection of specific contributors to the identified key problems. **Contextual conditions** are the social, economic, political, or natural conditions (discussed in Module 1) that contribute to underlying causes and, at times, result from the overarching problem (i.e., the cycle of vulnerability).

A city or rural region may appear to have the same overarching problem (e.g., food insecurity) and key problems as other regions (e.g., low income, poor yields, or poor nutrition), yet the **specific** underlying causes (and constraints that need to be addressed) may differ from place to place or group to group. We must look for **context-specific** causes.

Facilitator: Explain that the distinctions mentioned in this slide may not be apparent from the start. Practitioners must first create a thorough inventory of problems or limiting conditions. Then through organizing and filtering, the problems and causes will begin to fit into the various categories and develop a logical flow. As we will see, ensuring strong causal logic is extremely important.

Slide 7: Prioritize an Overarching Problem

After identifying a variety of problems in a community, we want to prioritize an overarching problem. Generally, we use two main criteria for prioritizing an overarching problem:

- The significance or scope of the problem, and,

- The degree to which solving the problem will lead to improvements in well-being for the impact population.

In FFP-funded programs the overarching problem is often pre-determined to be food insecurity.

Facilitator: Participants should draw on their analysis from Module 1. In that exercise they identified the most challenged livelihood outcomes. Remind participants that they should not be thinking about logistics (e.g., cost of program delivery) at this point. We are simply looking at the data and trying to discern the biggest problem.

Slides 8–9: Problem Statements

Once an overarching problem has been identified, it needs to be specifically phrased so that it identifies what, who, and where. This sets the stage for constructing a strong overarching goal in our TOC. For example:

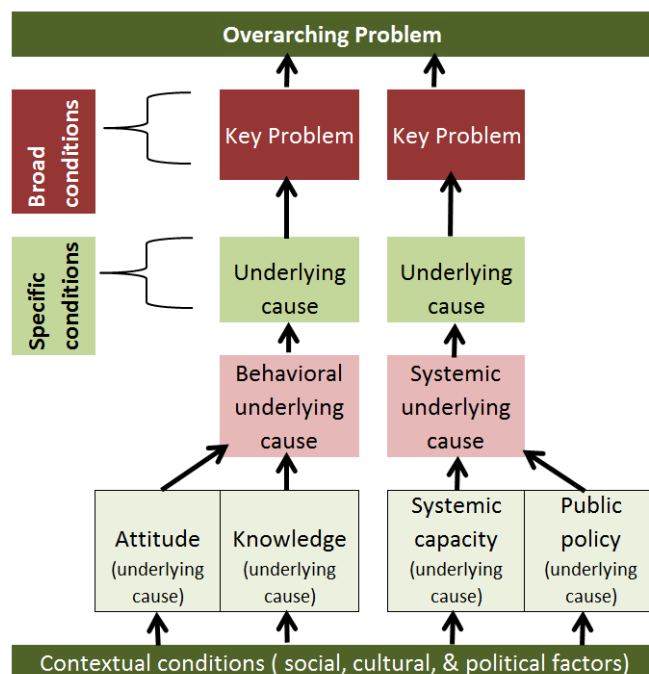
- Food insecurity for rural households in Jalapa District.
- Low nutritional status of poor children in Managua.
- Low agricultural yields for small farm households in Barisal Division.
- Low income for female small-business owners living in peri-urban areas of Kathmandu.

Slides 10–15: Underlying Causes and Causal Streams

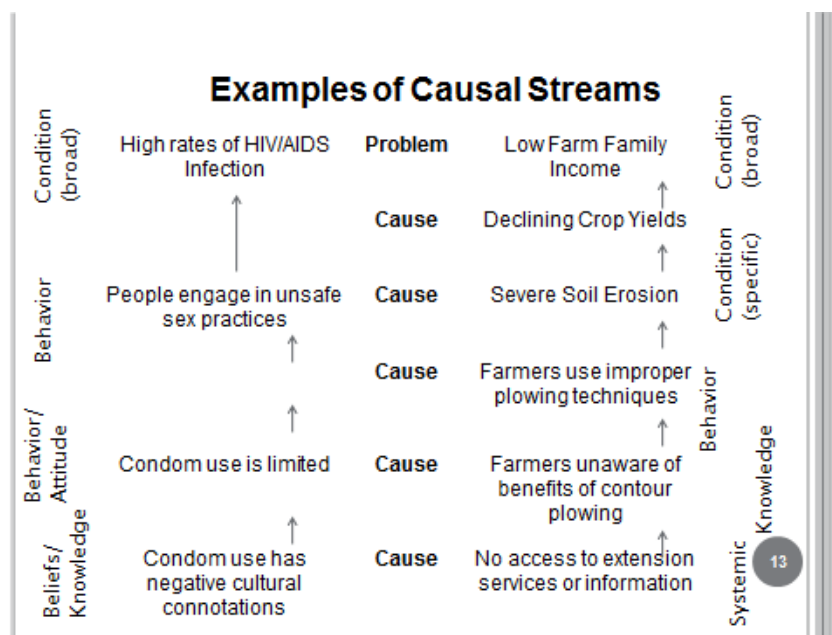
Slide 10: Well-being outcomes are usually extremely complex, more so than can be shown in a simple cause-and-effect stream. Problems and causes are often closely linked and can occur sequentially or simultaneously; they may occur independently or be intricately linked. Likewise, problems and causes often can be one in the same. For all these reasons, we must clearly identify the causes that contribute most significantly to key problems via a rigorous problem analysis.

Slide 11 and 12: As you begin to refine the causal streams, you will sort the various problems into:

- **Key problems:** Again, these are the broad conditions that affect people in a negative way and the types of broad problems we recognize in many poorer parts of the world (malnutrition, inadequate income, low agricultural production, etc.).
- **Underlying causes:** These are typically more context-specific than the broad conditions and include:
 - Human behavior and systemic weaknesses that contribute to the key problems and are influenced by contextual conditions.
 - Knowledge levels, beliefs, and attitudes that influence behavior and are rooted in contextual conditions.
- **Contextual conditions** that influence all of the above



Slide 13:



Adapted from: Caldwell, R. 2002. Project Design Handbook, Ed. T. Barton.
Prepared by TANGO International for CARE.

Facilitator: Slide 13 offers a simplistic example of how a chain of causes/conditions lead to a large problem. The arrows are intended to demonstrate that a lower cause leads to a higher problem. However, it is important to begin discussing the slide at the top and work down. For example, ask participants:

- What are the causes of high rates of HIV/AIDS infection? (One answer: people engage in unsafe sex.)
- Why do people engage in unsafe sex practices? (One answer: Condom use has negative cultural connotations.)

Also explain to participants that a causal stream is never this simple and linear. The higher we are on the causal stream the more underlying causes we can identify that feed into a problem.

Slide 14: When thinking about the myriad of underlying causes for the key problems you identified, it is helpful to consider how limiting factors present themselves at various levels of society.

- **Household level:** Household and individual constraints (e.g., behaviors, knowledge and skill levels, attitudes) that limit opportunities to achieve positive livelihood outcomes.
- **Community level:** Weak community cohesion and the lack of shared values that hinder the delivery and maintenance of social and economic infrastructure.
- **Systemic weaknesses:** Constraints that are external to the community, such as government policies, the delivery of social services, and market and social forces outside the community's control.
 - Paying attention to systemic weaknesses ensures that we tackle transformational resilience capacities.

Slide 15: The matrix demonstrates the intricate linkages between problems and their causes. This demonstrates the importance of continuously cross-checking that all types of underlying causes have been considered during the process of causal analysis.

Slide 16: You can use a matrix similar to the one on slide 16 (also on the participants' USB) to identify various types of underlying causes that contribute to key problems.

Facilitator: Typically there is not time to use the matrix in this workshop, but during the pre-design assessment phase it is a useful tool for organizing data as it comes in from the field.

Slide 17: Problem Trees

Once you have created an inventory of problems and underlying causes, you could organize them in a linear or hierarchical sequence. However, as we have learned, well-being outcomes are typically multifaceted and much more complex than a simple, linear cause-and-effect stream. Simple, linear models rarely allow for rigorous problem analysis – the **most critical (and often overlooked) element** of project design.

A more effective means of organizing problems and causes is to create a problem tree. Well thought out problem trees represent a systems-thinking approach to analyzing cause and effect and, in this light, are extremely useful for the TOC process because they help us to identify multiple causal linkages. While a problem tree is only one means of rigorous problem analysis, we elect to use the process in this course because of the ease in which a problem tree can be transformed into a TOC.

Slides 18–20: Problem Tree Examples

Facilitator: These three slides contain example problem trees. They all contain strong causal linkages as well as flawed logic. Spend about 30 minutes in plenary reviewing these samples.

Focus first on identifying the overarching problem, then the underlying causes, then the contextual conditions. Next, ask participants to identify underlying causes that are due to behavior and practice; those that are the result of knowledge, skills, attitude, beliefs; and finally underlying causes that are due to systemic constraints.

Next ask the group to identify strong and flawed causal logic.

Slide 21: Identify Impact Groups

Sometimes a problem disproportionately affects a subset of the impact population (e.g., women, children, youth, elderly, farmers, the chronically food insecure). In these cases, specify the subset impact group for the underlying cause. This will set the stage for later targeting.

Note that the example below does not include all the causal linkages in between the underlying cause and the overarching problem statement. The point of the example is to demonstrate subset groups, not causal linkages.

Impact group identified in overarching problem statement	Subset group identified for underlying cause
Food insecurity vulnerable households in rural districts of Nueva Rivas	Children under age 5 consume inadequate amount of nutrients
Food insecurity vulnerable households in rural districts of Nueva Rivas	Women have limited access to extension services

Slide 22: Summary

Summary of Key Concepts

- Different livelihood groups or different regions may appear to have the same overarching problem and broad categories of causes, yet it is critical that we identify **context-specific** underlying causes.

- Causes occur at multiple levels (household, community, and systemic) and in various forms (behavioral, knowledge, skills, or attitude-related, and systemic). For this reason, a thorough causal analysis is important.
- A problem tree helps us to visualize the hierarchy of problems and causes, as well as the cross-causal linkages.
- A problem tree with strong causal logic can be easily transformed into a TOC with strong causal logic. In the long run, it will save time and improve the quality of the TOC.

Small Group Activity 2.1

Introduction

Activity 2.1 is extremely involved and likely will consume the rest of the available time for this module. The activity gives participants an opportunity to review their organized data from Module 1, identify key problems, draft a problem statement, and use causal analysis to create a problem tree.



Estimated duration:
5.5 hours with breaks

Activity 2.1 can be found on **slides 22–24** of the PowerPoint Presentation for Session 2.1.

Facilitator: Activity 2.1 can be broken into mini-activities:

1. Draft an overarching and key problem statements (30 minutes).
2. Create a problem tree using causal analysis (3 hours).
3. Midway Q&A in plenary about the process (15 minutes).
3. Gallery walk and peer review (30 minutes).
4. Refine causal analysis based on feedback (1 hour).

Learning Objectives

This activity will help participants:

- Use data to identify key problems in a community and draft a strong problem statement.
- Identify underlying causes of problems.
- Critically analyze and organize problems and causes into a logical flow that will inform the development of a TOC.

Companion Handouts

- Instructions for Activity 2.1
- Handout 2.1c 2-page problem tree

Steps

Review the activity instructions in plenary.

Instructions

Designate group members to fill the following roles:

- One Chief of Party to make a final decision when the group comes to an impasse.
- One data gap documenter.
- Several group members devoted to digging for more evidence.
- One graphic guru to capture the problem tree in electronic format.
- One presenter.

Use the preliminary analysis (Tool 1.2a and PowerPoint presentation) carried out during Day 1.

1) Identify an overarching problem and write a problem statement:

- **WHAT:** Determine the condition the project is intended to address. (Generally, if the project is responding to a FFP RFA the condition will be FOOD INSECURITY.
- **WHO:** Identify the population affected by the condition (e.g., target population).
- **WHERE:** The area or location of the population.

2) Prioritize key problems (broad conditions) and draft concise statements:

Generally, these are the well-being outcomes you stated were most challenged in Module 1, although you may include more key problems, if warranted.

3) Document underlying causes on sticky notes:

- Create an inventory of underlying causes on sticky notes, starting with the information you organized in Exercise 1.2. Write each cause as a concise statement, making them as specific as possible, e.g., limited access to business development training. If the population most affected by a specific condition is a subset of the population in the overarching problem statement, make it clear in your statement, e.g., limited access to business development training for women.
- To make sure you **include the various types of causes (systemic, knowledge, and behavioral)** it can be helpful to use a different color sticky note for each one, or make some type of coding on the sticky note. As your model develops you will start to recognize if one type of cause has been overlooked. Note: not every underlying cause will fit into these three categories. Remember some underlying causes are simply the result of systemic, knowledge, or behavioral constraints.
- **Get into the practice of noting the evidence base for each underlying cause on the back of the sticky note** (e.g., focus groups or baseline survey). This will help proposal writers later on. Try to limit the causes you include to those you have data for. If you don't yet have an evidence base for an underlying cause, but there is a strong hypothesis and group agreement to include it, use some type of coding on the sticky note to indicate this is still

an evidence gap (different color paper, different color text, border, etc.), and note the evidence gap in a running list on your flipchart.

4) Begin causal analysis to develop the problem tree

- Organize causes to demonstrate how they occur sequentially or simultaneously.
 - Start by working your way down from the key problems.
 - Ask “what are the key reasons problem X exists?” Keep asking “are there any other reasons?”, until all causes that can explain **most of** the problem are identified.

5) Once a causal stream is in place check the causal logic moving downstream and upstream:

- Move down the stream using statements such as “Condition X exists.....because of Condition Y.” For example, there is a high prevalence of livestock disease because there is limited adoption of improved husbandry practice. There is limited adoption of improved husbandry practices because there is limited access to animal health care supplies and limited knowledge of how to protect livestock health.
- Check causal logic moving *up the stream*, e.g., Condition X and Condition Y and Condition Z are the main reasons Condition A exists.
- It may seem redundant to move up and down stream, but you’ll be amazed at the different insights you glean by moving in the two directions.

6) Periodically check the balance of types of constraints (knowledge, behavioral, systemic).

7) Once the causal logic begins to hold, capture the problem tree in an electronic format. If the diagram cannot fit legibly on one page, create a separate page for each key problem. Be sure to show how the problems link to one another across pages. See Handout 2.1c.

A problem tree with strong causal logic is extremely important to proper development of a good TOC. If done well, it will make the rest of the TOC process much easier.

Presentation

Facilitator: Following the afternoon break, all groups will share their evolving problem trees in plenary via a gallery walk, asking for critical peer review and feedback.

During this time, you may ask for any specific questions related to the processes of causal analysis. Depending on how many questions are raised and how much time is available, the facilitator may ask additional questions, such as:

- Did the data analysis process from Module 1 provide a logical basis for drafting an overarching problem statement? If not, then why?
- Is there consensus among the group regarding the causal linkages or is there disagreement about the hierarchy? How are you resolving differing opinions?

Following the gallery walk, participants should spend another hour or so in their small groups continuing to refine their problem tree based on feedback from peers and facilitators.

Works Referenced in Module 2

Module 2 content draws heavily on the following distance learning course created for Florida International University and the USAID Office of Foreign Disaster Assistance:

- Starr, L., S. Nelson, and T. Spangler. 2013. *Livelihoods and Disaster Risk Reduction*. Module 2: Livelihood Systems and Risk Assessment. TANGO International and Florida International University.

Additional resources:

- Overseas Development Institute. 2009. Planning Tools: Problem Tree Analysis. Available at: www.odi.org/publications/5258-problem-tree-analysis
- The Evaluation Toolbox. 2010. Problem Tree/Solution Tree Analysis. evaluationtoolbox.net.au/index.php?option=com_content&view=article&id=28&Itemid=134

End of Module 2

Module 3: Making the Theory of Change Plausible: From Problems to Solutions

About Module 3

Overview

Module 3 builds on previous modules. Module 1 provided an overview of the theory of change (TOC) process, covered resilience concepts, and introduced the data set that provides the foundation for the remainder of the training. In Module 2 participants practiced using causal analysis to create a problem tree. With this background established, we can now delve into potential solutions, identifying the conditions that will need to be in place in order to achieve an overarching goal, and explore assumptions, rationales, and risk. As with earlier modules, we continue to see the fluidity of the process as we attempt to break down the individual steps for clarity and understanding.

The purpose of this module is to demonstrate how proposed project outcomes must be rooted in evidence-based problems. The objectives of Module 3 are to help participants:

- Fully understand how to convert a problem tree to a solution tree, a precursor for the TOC.
- Identify domains of change and pathways of change, especially non-linear pathways of change.
- Appreciate the critical need to consider assumptions and rationales that underpin causal logic.

Structure and Workload

Module 3 is composed of facilitator-led presentations on two topics:

- 3.1 From Problems to Solutions
- 3.2 Assumptions and Rationales

The session objectives are reinforced using interactive plenary sessions, Q&A with the facilitator, and small group work.

Module 3 Session 1: From Problems to Solutions

Introduction

Now that workshop participants understand how to identify causal streams, we will demonstrate how to use this analysis to identify solutions in the form of goals, domains of change, and outcomes.



Estimated duration:
25 minutes

Learning Objectives

Session 3.1 will help participants:

- Transform problem trees to solution trees with goals, domains of change, and outcomes.
- Identify non-linear pathways of change.
- Understand how to link pathways of change across page in a diagram.
- Appreciate the importance of refining pathways of change to include only essential outcomes.

Companion PowerPoint

A PowerPoint presentation—3.1 From Problems to Solutions—accompanies this lesson as a separate file.¹¹

Slides

Slide 2: The TOC Process

The TOC roadmap appears in every session to orient participants about where they are in the process.

Slides 3–4: Convert Problem Statement to Goal

Moving from a problem tree to a solution tree can be both intuitive and complex. Breaking the process down into small steps helps us see it more clearly.

Now that we have drafted a strong problem statement, we can use this statement to define a goal for a program. The goal should specify the kind of enduring change we hope to see in the lives of an impact population group. To convert the problem statement to a goal, it needs to be reframed in terms of the desired change and stated as if it has already been achieved. For example “Increased food security for small farm households in the municipalities of Magdalena, Jalapa, and Nueva Isabel.”

¹¹ The most current PowerPoint slides and handouts can be found at www.fsnnetwork.org/theory-change-training-curriculum.

Remember: WHO, WHAT, WHERE, but not HOW. The “how” will be explained by the TOC causal logic.

Some poor examples of a long-term goal are:

- To improve food security, income, and resilience for chronically food-insecure rural women through their social and economic empowerment.
- To improve local facilities and to empower and engage 12,500 targeted households (50% women) in agricultural productivity, income, and employment towards improving their basic food needs in the districts of Barguna and Chittagong.

Facilitator: Ask group to identify why these goals are poorly-defined. These are real samples from USAID Office of Food for Peace (FFP) programs with identifying factors changed.

The first statement has too many goals in one statement...“food security income and resilience.” It also states how this will be realized “through their empowerment.” Goals should never include the “how.” The second statement also has multiple goals. This becomes problematic for M&E to state whether the goal has been reached, if for example, data show improvement in income, but not for agricultural productivity. By refining the analysis we can usually determine the causal hierarchy of these multiple outcomes and simplify the goal statement.

Slides 5–7: Convert Key Problems to Domains of Change

Referring back to the problem tree, identify the broad conditions that are significantly contributing to the overarching problem. These are the problems that will be converted to domains of change.

Domains of change (also referred to as FFP purposes) are main areas in which change must occur in order to be able to reach the goal. A number of domains of change may ultimately lead to achieving the same goal.

Domains of change statements are determined by simply rephrasing the key problems to indicate a desired result. These are comprehensive; they are not limited only to what one program can address. **This is a key different between a results framework and a TOC!**

Examples of Converting Key Problems to Domains of Change

Key underlying cause	➡	Converted to...	➡	Domain of change
Limited ability to recover from shock		Improved ability to recover from shock		
Low crop production		Increased crop production		
Inequitable and limited income		Increased equitable income		

Slides 8–11: Convert Underlying Causes to Solutions

After drafting a goal and converting key problems to domains of change, we begin to move through the problem tree to the myriad of underlying causes. Convert each problem/cause in a similar manner, ensuring that you are restating each problem as a condition already resolved rather than something that will happen in the future, or as actions.

Some examples:

- Key Problem: Childhood malnutrition.
- Domain of change: Childhood nutritional status improved – Yes!
- Domain of change: Childhood nutritional status will improve – No!

- Underlying Cause: Children under age 5 consume inadequate amount of nutrients.
- Solution/Outcome: Improved dietary diversity for children under age 5.

- Underlying Causes: Children who get diarrhea are not given oral rehydration therapy (ORT).
- Solution/Outcome: Increased use of ORT for children experiencing diarrhea.

Slide 9: The easiest way create a solution tree is to simply invert the problem tree. The problem statement becomes the goal, the key problems are reworded into domains of change, and the remaining underlying causes are flipped into solutions, which are later sorted into outcomes and outputs. Of course, for this to work properly, the causal linkages in the problem tree must be complete and thorough! Don't forget to clearly identify the subset impact populations—groups who are disproportionately affected by the problem—in your solution statements, e.g., *improved access to business development training for women and youth*.

Slides 10-11 demonstrate how problems/causes are converted into solutions. It is important to mirror every limiting condition that is documented in problem tree in the solution tree.

Facilitator: The type on these slides is small. You may wish to provide a full page handout of these slides so that participants can review individually.

Slide 12-13: Pathways of Change

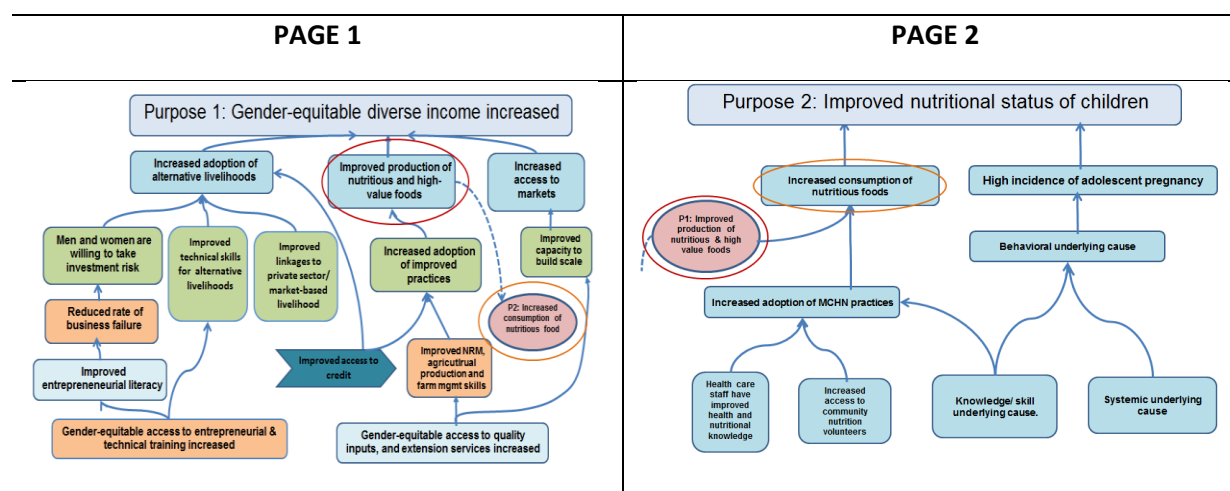
A pathway of change illustrates the series of incremental changes that are that are, when taken together as a set, sufficient to achieve a domain of change. You can identify a pathway of change by tracing all the linkages that lead to each domain of change. Some solutions will feed into more than one domain of change and should be a considered a part of all pathways they contribute to.

FFP refers to the collection of solutions as pre-conditions, comprising both outcomes and outputs. The term “incremental outcomes” is also commonly used by various actors.

Facilitator: Refer to Slide 13, which shows three separate pathways of change, each coded in a separate color. Multi-colored solutions indicate a pre-condition that contributes to more than one pathway of change.

Similar to the problem tree, to ensure the diagram is user-friendly it may have to stretch onto several pages. It is common for each domain of change to have its corresponding pathway presented on a separate page. Just be sure to make it clear when pathways cross pages. An easy way to do this is to repeat outcomes that cross pages on both pages using a different shape or color to indicate a linkage, and indicating the domain page that it will connect to.

Facilitator: Use Slides 14 and 15 to demonstrate a link across pages that each depicts one pathway of change.



Slide 16-17: Refining pathways of change

Slide 16: Similar to the causal logic checks we carried out for the problem tree, we must periodically review the solution tree following the pathways of change upstream. One way to do this is by using “IF-AND-AND- then” statements to tell the story of change. For example, “IF *farmers technical skills for alternative livelihoods improve AND linkages to private sector livelihood opportunities increase, AND, farmers have improved access to credit, AND men and women are willing to take an investment risk THEN we will see an increased adoption of alternative livelihoods.*

Slide 17: By refining the pathways of change, and examining each solution, we move from a solution tree to the beginnings of a TOC. During this process some solutions will remain as outcomes, but some may actually be assumptions, outputs, or even indicators. This is the time

to weed through and determine which solutions are essential *outcomes* to each domain of change, and to review whether solutions listed might actually be an activity, an output, an indicator, an assumption, or a rationale.

You may notice that some solutions are actually indicators, rather than outcomes (i.e., stunting reduced). If so, remove the indicator from the model, but note which outcome it relates to for future reference.

You may find that some of your solutions are actually outputs –immediate products of interventions. Examples include: latrines rehabilitated to hygienic sanitation standards, or vulnerable groups trained on DRR practices. When you determine that a solution is an output, leave it in the model, but code it with a new shape or color so you will recognize all outputs in the diagram.

From this point forward, we will start to use the terms outcomes and outputs instead of solutions, and TOC instead of solution tree.

Slides 18-19: Breakthroughs

A **breakthrough** is a change that represents a leap forward or an advance on the pathway of change that is not easily reversed. Generally these are new skills with limited backsliding or variation in adoption once learned (e.g., literacy), policies that are implemented and enforced by the government, or a change in attitudes and beliefs that lead to improved outcomes. Breakthroughs may or may not be catalyzed by external assistance, but because breakthroughs often are pre-conditions for multiple outcomes at the next level, they can be very helpful to teams as they attempt to set implementation priorities and visualize and track project progress.¹²

In the sample TOC on **slide 19**, the breakthrough “*positive change in gender roles and norms*” is shown in a different color and shape than other pre-conditions.

Facilitator: On Slide 19, have participants identify the pathways leading to each domain of change. Stress that this is another way TOC is different from a results framework. Results frameworks do not show cross-sectoral linkages, but are typically organized by technical silos.

Slide 20: Summary

Summary of Key Concepts

- Moving from problems and causes to goals, solutions, and outcomes is both simple and complex. The graphic representations of a problem tree and solution tree mirror each other. As we progress we must continue to analyze and review each step to ensure each solution is appropriate and logically addresses each problem, while also remembering the causal logic of the solution tree should flow clearly on its own.

¹² FFP does not require that projects highlight breakthroughs in the TOC diagram.

- All solutions should be stated as results.
- A **pathway of change** illustrates the series of incremental changes that are that are, when taken together as a set, sufficient to achieve a domain of change.
- To ensure the diagram is user-friendly it may have to stretch onto several pages. It is common for each domain of change to have its corresponding pathway presented on a separate page.
- Refining pathways of change is the step where a solution tree begins to transform into a TOC diagram.

Small Group Activity 3.1

Introduction

Moving from a problem tree to a solution tree can be both intuitive and complex. On the surface, one is simply a mirror image of the other. However, the complexity of the TOC begins to emerge when we do this. For this reason, participants will have time during this activity to refine and finalize their problem tree, review their work up to this point, develop their solution tree, and finally, refine the pathways of change to only include essential outcomes. At the end of this activity, each group will have a fledgling TOC.



Estimated duration: 3 hours

Learning Objectives

This activity will help participants:

- Convert a problem trees to a solution trees in a straightforward, structured way.
- Identify non-linear pathways of change and link them across pages in the solution tree diagram.
- Refine pathways of change to include only essential outcomes.

Companion Handout

Instructions for Small Group Activity 3.1.

Slides

Slides 21-22: Develop a Solution Tree

Facilitator Instructions:

- Start with the electronic version of your group's problem tree. Save a new document as "solution tree" and begin to invert all problem statements.
 - Reframe the overarching problem to a goal.
 - Reframe key problems to domains of change/purposes.
 - Reframe all problems as solutions.
 - Make sure all statements convey a result.
- Identify and refine pathways of change. Distill pathways of change to *essential outcomes*.
 - *Remember that each outcome in a TOC will need to be measured by an indicator. You may notice that you have "solutions" that will be used as indicators for other outcomes (i.e., stunting reduced is an indicator for improved childhood nutrition). If so, remove this "solution" from the TOC, but note which outcome it relates to for future reference.*
 - *You may find that some of your solutions are actually outputs –immediate products of interventions. Examples include: latrines rehabilitated to hygienic sanitation standards, or vulnerable groups trained on DRR practices. When you determine that a solution is an output, leave it in the model, but code it with a new shape or color so you will recognize all outputs in the model. At a later stage we will ensure there is an output linked to all lower-level outcomes.*
 - *From this point forward we will start to use the terms outcomes and outputs instead of solutions. Your TOC is on its way!*
- Identify breakthroughs (outcomes not easily reversed or outcomes that if achieved will pave the way for multiple outcomes at the next level) and code them with a new shape or color.
- Periodically check the causal linkages between each outcome using IF-AND-AND-THEN statements. Try to tell the TOC story. This process often identifies remaining flaws in causal logic.
 - Check for systemic, knowledge/ skill-related, and behavioral outcomes.
 - Ask yourself if each outcome is a logical and appropriate pre-condition for the outcome above it.
- Continue to document evidence gaps. Knowing what information you need to capture at a later date will assist you to refine the TOC over the project's life.

Module 3 Session 2: Assumptions and Rationales

Introduction

At the halfway point of the curriculum, we start to see the TOC emerge from the process. Session 3.2 introduces assumptions and rationales which are necessary to recognize how and why a pathway of change may or may not flow.



Estimated duration: 30 minutes

Learning Objectives

Session 3.2 will help participants:

- Identify conditions that are important to the success of a TOC, or some portion of it, but are outside of a project's control.
- Determine what facts and other information will help explain why a pre-condition or set of pre-conditions is necessary and sufficient to ensure an outcome.
- Distinguish assumptions from rationales.

Companion PowerPoint

A PowerPoint presentation—3.2 Assumptions and Rationales—accompanies this lesson as a separate file.¹³

Slides

Slide 2: The TOC Process

The TOC roadmap appears in every session to orient participants about where they are in the process.

Slides 3: Assumptions

Assumptions are conditions (often contextual) that are important to the success of a TOC, or some portion of it, but that are outside of a project's control.¹⁴ Assumptions are things that already exist and that we expect will remain in place for the duration of the project cycle. Assumptions should be supported by evidence and explained in detail in the TOC narrative.

¹³ The most current PowerPoint slides and handouts can be found at www.fsnnetwork.org/theory-change-training-curriculum.

¹⁴ Because this course is oriented toward staff from FFP-funded projects, we elect to use USAID's definitions of assumptions, recognizing that other theory of change guidance discusses several types of assumptions, including: 1) assumptions related to the connections between the underlying causes and the problem that stakeholders are trying to address; 2) assumptions that explain why each outcome is necessary to achieve the long-term impact (assumptions behind the if-then hypotheses); and 3) assumptions about the context/environment in which the TOC is situated.

Examples:

- Annual flooding in project area will not exceed the 10-year flood level.
- Government agricultural extension worker turnover rate remains stable.
- Economic conditions remain favorable for private sector investment.

Slides 4-7: Common Assumption Pitfalls

This set of slides take examples from actual DFAP design workshops to demonstrate common pitfalls:

- Stating an assumption that data have already shown to be untrue.
- Simply restating the outcome to outcome linkage.
- Stating something that should be an action point to get specific evidence.
- Including a factor that should be within the realm of project influence.

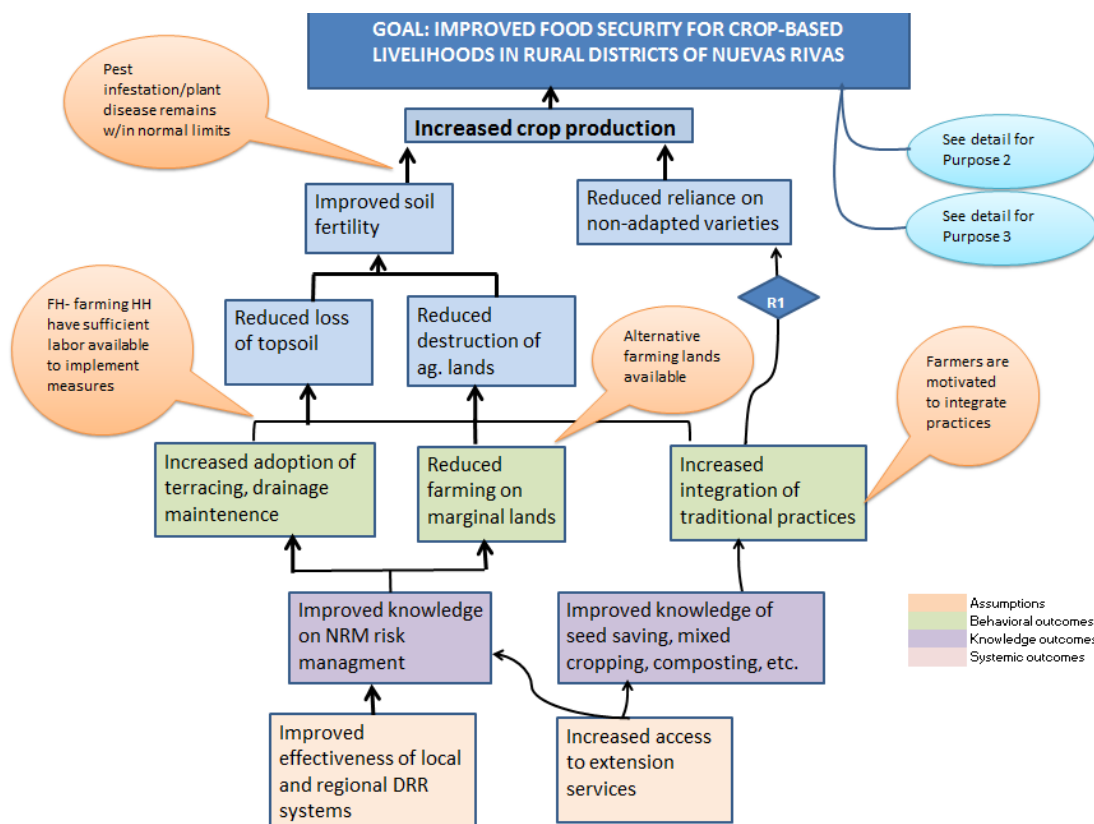
Facilitator: Ask participants to share their own examples of assumptions they have struggled to articulate.

Slide 6 offers improved wording that demonstrates the condition is already in place. For example “Government **continues** to consistently commit human resources” and “Adequate post-harvest storage facilities **remain in place** to absorb increased production” These statements indicate that we have confirmed that the condition exists, or is in place. Evidence to support the claim needs to be included in the TOC narrative.

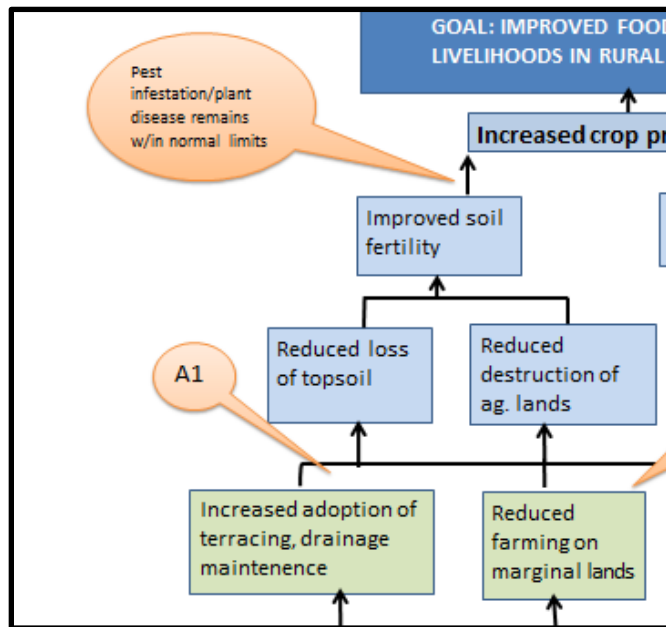
Slide 8: Find the Weak and Strong Assumptions

Slide 8 demonstrates a portion of a TOC with both weak and strong assumptions.

Facilitator: Ask participants if they can identify which assumptions are weak and which are strong before clicking to activate animation on the slide.



Alternative farming lands available	WEAK: Find out if they are or are not available. Rephrase, to alternative farming lands remain available. If land is not available, review causal logic. Can the outcome “reduced farming on marginal lands” be achieved without this in place?
Farmers are motivated to integrate practices	WEAK: This is within the realm of project influence.
Female-headed farming HH have sufficient labor available to implement measures	WEAK: Find out what the time burden is. This will be critical to adoption and has implications for the project intervention design.
Pest infestation/plant disease remains within normal limits	STRONG: Document what normal limits are in the TOC narrative, and why you believe that nothing will change (i.e., projections from the Ministry of Agriculture).



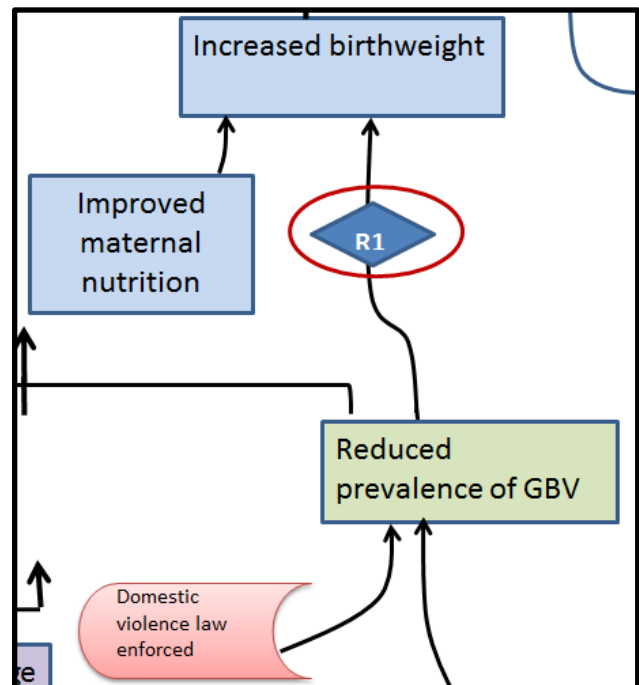
Slide 9: Inserting assumptions in the TOC model

Assumptions need to stand out from outcomes, therefore choose a unique shape and color to highlight to users these elements that are outside of the project's influence. If there is not room to fully articulate an assumption, insert an identifier such as A1 or A2, and record the full assumption, and the evidence supporting it in a matrix that you can later reference when drafting the TOC narrative. Assumptions need to be explained in the TOC narrative.

Slide 10: Rationales

Rationales are different from assumptions. They help explain underlying logic and provide evidence about why outcomes in a pathway of change are necessary preconditions to outcomes above them. Rationales are not needed for every connection in the pathway, but rather only for those for which the causal logic may not be obvious to all users.

For example, a rationale might be necessary to support a link showing that reduced prevalence of gender-based violence is a contributor to increased birthweight. If readers are not aware of evidence showing that physical abuse in pregnancy increases the risk of low birthweight,¹⁵ this causal logic might not make sense, and a rationale is necessary. To note a rationale in the TOC model, make a small reference in the model and provide the full explanation and evidence in the TOC narrative.



¹⁵ Valladares E., M. Ellsberg, R. Peña, U. Högberg, L. Persson, and A. Lars. 2002..

*Slide 11: Summary***Summary of Key Concepts**

- Assumptions and rationales serve different purposes in the TOC.
- Assumptions highlight conditions that are important to the success of a TOC, or some portion of it, but are outside of a project's control.
- Rationales help explain underlying logic and provide evidence about why outcomes in a pathway of change are necessary preconditions to outcomes above them, particularly for linkages that may not be obvious to all users.
- You do not need an assumption or a rationale for every causal linkage. Only insert them in the TOC model when it makes sense to do so.
- Use a different color and shape to highlight assumptions and rationales in the TOC. If the model becomes too crowded, insert an identifier that will link to the details in the TOC narrative.

Small Group Activity 3.2**Learning Objectives****Estimated duration: 2 hours**

This activity provides hands-on practice for identifying assumptions that underpin TOC logic, for determining where rationales might be needed in a model, and for systematically tracking the evidence base that supports assumptions and rationales.

Companion Tool

Tool 3.2 Assumptions and Rationale Matrix is located on the USB.

Instructions:**ASSUMPTIONS and RATIONALES**

1. Start with your electronic TOC diagram and TOOL 3.2 on your USB.
2. Select one pathway of change and check for assumptions between each pre-condition and the outcome above it.
3. Insert assumptions in the TOC diagram using a different color and shape. Give each assumption a number (A1, A2 etc.).
4. Record the assumption and the evidence that supports the assumption in a matrix (Tool 3.2 on your USB). This will be very useful later when you are writing the TOC narrative.

RATIONALES

5. Discuss linkages where rationales might be needed—areas where the causal logic might not be clear to all users.
6. Add an identifier (R1, R2, R3) in the TOC diagram, using a different shape and color.
7. Enter notes to support the rationale in the matrix (Tool 3.2). This includes web links, references to literature, or other evidence. You will need this information when you draft the TOC narrative.
8. If time, repeat steps 1-7 for other pathways of change.

Works Referenced in Module 3

- Starr, L., S. Nelson, and T. Spangler. 2013. *Livelihoods and Disaster Risk Reduction*. Module 3: Program Design. TANGO International and Florida International University.
- Taplin, D., H. Clark. 2012. *Theory of change basics: A primer on theory of change*. New York, NY: ActKnowledge.
- USAID Bureau of Democracy, Conflict, and Humanitarian Assistance Office of Food for Peace. 2016. *Technical Reference for FFP Development Food Assistance Projects*. Chapter II Mandatory Program Design Elements. Washington, DC.

Module 4: Making the Theory of Change Feasible

About Module 4

Overview

Module 4 builds on previous modules. Module 1 provided an overview of the theory of change (TOC) process, covered conceptual frameworks, and introduced the data set that provides the foundation for the remainder of the training. In Module 2, participants practiced using causal analysis to create a problem tree. In Module 3, the focus shifted to solutions, including drafting a goal, identifying domains of change and pathways of change, and articulating assumptions and rationales. This progression leads us now into the latter stages of the TOC process. Module 4 explains how to determine which domains of change and outcomes a project will address. Additionally, participants identify intervention outputs and deeply explore the assumptions and risks associated with them. Finally, the lesson offers a few tips on making the TOC diagram more reader-friendly.

The purpose of Module 4 is to transition from a TOC that is plausible—the causal logic is in place—to a TOC that is feasible—the necessary actions to set change in motion are identified. The objectives of the lessons in Module 4 are to help participants:

- Prioritize the domains of change and outcomes a project will address.
- Prioritize intervention outputs that will lead to intended outcomes.
- Recognize assumptions and risks related to proposed interventions.
- Make the TOC diagram reader-friendly.

Structure and Workload

Module 4 is composed of facilitator-led presentations on four topics:

- Session 4.1: Prioritizing Domains of Change
- Session 4.2: Interventions
- Session 4.3: Refining the TOC graphic

The module's objectives are reinforced using interactive plenary sessions, Q&A with the facilitator, and small group work.

Module 4 Session 1: Prioritizing Domains of Change

Introduction



Estimated duration: 25 minutes

As we reach the later stages of developing the TOC, additional elements must be considered. As discussed, a TOC is not limited to the changes that one project will influence. Typically, many stakeholders contribute to changes necessary to reach a common overarching goal. Once a TOC is developed and vetted by various stakeholders, we must determine who exactly will be responsible for what.

Learning Objectives

Session 4.1 will help participants understand basic selection criteria for prioritizing the domains of change and outcomes that a project will address.

Companion PowerPoint

A PowerPoint presentation—4.1 Prioritize Domains of Change—accompanies this lesson as a separate file.¹⁶

Companion Handout

- Handout 4.1 Prioritize Domains of Change

Slides

Slide 2: The TOC Process

The TOC roadmap appears in every session as a means to orient participants about where they are in the process.

Slide 3: Which domains of change should we address?

Remember that a TOC should not be molded to what one organization can accomplish. It should show all the steps that lead to a change for a region, community, or population. As such, one organization should not be expected to accomplish all the domains of change in the model.

A number of possible domains of change may surface during analysis. Your team will need to collaboratively select which domains to address. Selection criteria should include the following:

- **The domain has high synergy with other domains.** The idea of synergy is that the combined impact of addressing two or more areas is greater than the sum of addressing each domain individually.

¹⁶ The most current PowerPoint slides and handouts can be found at www.fsnnetwork.org/theory-change-training-curriculum.

- **Addressing the domain fills a gap.** Other stakeholders are not currently focused on this domain. The extent to which other stakeholders are investing in a particular domain should become apparent through a stakeholder analysis.
- **Addressing a domain maximizes your organization's comparative advantage.** The comparative advantage of an organization refers to the organization's ability, skills, and experience in addressing an issue relative to any other given organization. If Agency A has spent several decades conducting research and implementing gender equality programs in Southeast Asia, one could say that they have a comparative advantage in that area relative to Agency B. On the other hand, Agency B may have multiple livelihoods technical experts in the same region. In which case a domain of "improved livelihoods" would link to Agency B's comparative advantage.
- **Addressing the domain has potential for partnering.** In balance with comparative advantage, a complete TOC depends on partner agencies to address the cross-sectoral and multi-causal linkages.
- **Addressing the domain responds to donor interest.** An agency must be able to secure appropriate and sufficient resources to undertake a program strategy.

Slides 4–5: Which outcomes should we address?

Sometimes a project will address all domains of change in a TOC, but will not directly address all the outcomes in the pathway that leads to a domain of change.

This typically happens because another stakeholder is focused on the outcome. For example, an organization may elect to address the domain of change "improved income." A necessary outcome in the pathway of change for that domain is "improved market access." If, in a proposed project area, the organization knows that the USAID Feed the Future initiative has been actively trying to improve market access for the past 2 years, the organization would not prioritize this essential outcome for project intervention. Instead the organization would develop a plan to coordinate with Feed the Future efforts to track progress on this outcome via continuous discussion with Feed the Future, without being directly involved in implementation.

The risk of not directly addressing every outcome in a pathway of change is that you must rely on the effectiveness of other stakeholder efforts to achieve the domain of change. Monitoring other stakeholders' progress on the outcome becomes especially critical, which is manageable through effective communication and coordination.

Selection criteria for project outcomes are similar to those for project domains of change.

- **Addressing the outcome fills a gap.** Other agencies are not currently focused on this outcome.
- Addressing the outcome will maximize your organization's **comparative advantage**.
- The outcome has **high synergy** with other outcomes.
- Addressing the outcome has **potential for partnering**.

Slides 6–7: Prioritizing Domains of Change and Outcomes

Facilitator: Slide 6 is simply a reminder for participants to reference Handout 4.1. Review the content of Handout 4.1 as you walk participants through the example on Slide 7 of why the hypothetical nongovernmental organization (NGO) may elect to address only certain domains and outcomes.

Slide 7 offers an example of how to present a graphic that clearly identifies what outcomes a project will or will not address. Pink arrow shapes are outcomes not addressed by the project.

Slide 8: Document Responsibilities

Use dotted outlines, different shapes, and/or different colors to depict outcomes addressed by other actors in the TOC model. In the TOC narrative you will clearly document the stakeholders who will address other outcomes or domains of change, as well as how the project will know if progress is being made in these areas.

Small Group Activity 4.1

Introduction

In this activity, participants will use the criteria discussed to prioritize and identify domains and outcomes that their organization may address.



Estimated duration:
2 hours

Learning Objectives

This activity will help participants determine roles and responsibilities for TOC outcomes and domains.

Companion Handout

Instructions for Activity 4.1.

Instructions:

- Review criteria for selecting domains and outcomes.
- Revisit your TOC model, apply the criteria, and identify the domains and outcomes that your project will address. The expertise at your table will determine your mock NGO's comparative advantage. The mock stakeholder analysis in your data set will help determine where there are gaps to fill.
- Provide your rationale for selecting or not selecting the various outcomes / domains on the flipchart.
- Determine which stakeholders might address any domain or outcome that your project will not attempt to directly influence.

- Change the shape/color of outcomes that will be addressed by other actors in your TOC model.
- Document key implications for the TOC success if other actors do not make progress on an outcome as anticipated.

Plenary Session and Gallery Walk

Facilitator: Select two groups to present for 10–15 minutes. Presentations should include a brief discussion of:

- The process they used to prioritize the domains of change/outcomes their project will address.
- Challenges that surfaced and how they were dealt with.
- Anticipated challenges and solutions related to tracking progress in domains of change or outcomes that will be addressed by other actors.

Next, have participants conduct a gallery walk, where all groups share their TOC models, in particular the prioritized domains of change/outcomes.

Module 4 Session 2: Interventions

Introduction

Now that we have determined which outcomes our project will be responsible for producing, it's time to identify specific outputs from project interventions that will set the wheels of change in motion.



**Estimated duration:
30 minutes**

Learning Objectives

Session 4.2 will help participants:

- Identify entry points in the TOC for intervention.
- Reflect on criteria for selecting interventions.
- Explore assumptions, risks, and key questions related to interventions.
- Understand how to insert intervention outputs in a TOC graphic.

Companion PowerPoint

A PowerPoint presentation—4.2 Interventions—accompanies this lesson as a separate file.¹⁷

¹⁷ The most current PowerPoint slides and handouts can be found at www.fsnnetwork.org/theory-change-training-curriculum.

Companion Handouts and Tools

- Handout 4.2a Critical Questions for Interventions

The following tool is located on participants' USB drive:

- Tool 4.2 Outcomes Interventions template

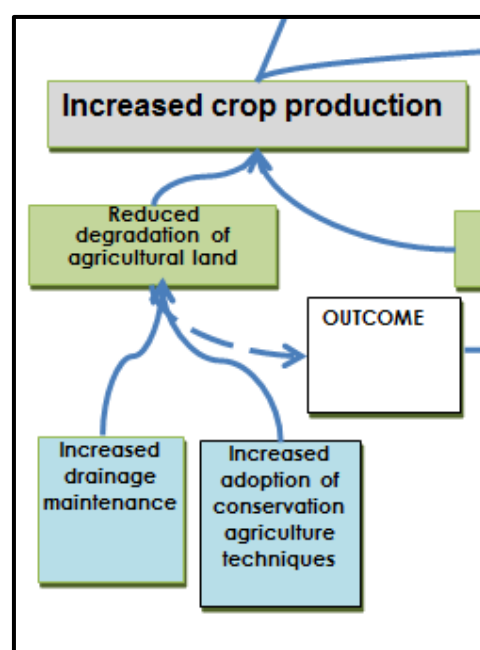
Slides

Slide 2: The TOC Process

The TOC roadmap appears in every session as a means to orient participants about where they are in the process.

Slides 3-4: Which outcomes need an intervention?

Not every outcome in the TOC requires an intervention. Some outcomes are “actionable” and, thus, require an intervention; others are simply the result of achieving the chain of outcomes that comes before them. In the example to the right, an intervention is needed to achieve the outcomes “*increased adoption of conservation agriculture techniques*” and “*increased drainage maintenance*.” to set the wheels of change in motion. However, the next outcome in the pathway of change, “*reduced degradation of agricultural lands*” requires no intervention. The two outcomes leading to it set the wheels of change in motion. If they are achieved, and evidence points to no other main causes of agricultural land degradation, our theory states that “*reduced degradation of agricultural lands*” will also be realized.



At this stage, actionable outcomes are typically at the lowest level in the pathway of change. We will add a new entry level to the TOC by adding key **intervention outputs**.

Facilitator: In plenary, spend 5-10 minutes briefly reviewing one or two group's models and ask participants to point out actionable outcomes.

Slide 5-6: Selecting Interventions

Slide 5: If you have followed the process thoroughly and rigorously to this point, the menu of potential interventions will be significantly reduced because **the first selection criteria is that the intervention must have a clear and logical link to at least one outcome presented in the TOC graphic.**

Slide 6: Choosing the best intervention for any given cause requires a good list of options and alternatives. Ideas for interventions can come from many places. While creativity and an open mind are both important, options should also have a basis in evidence and experience. They can come from:

- Best practices (including latest assessments).
- Lessons learned from previous projects (including evaluation reports).
- Individual and institutional experiences.
- Inputs from communities on desired solutions.
- Ideas from reviewing research and secondary literature.

Slide 7: Once all options have been expressed, the next step is to examine and eventually select which ones the project will implement. The selection process can be as simple as arriving at group consensus or as complicated as applying decision tools to make the choice. Regardless of how a team ultimately arrives at selecting an intervention, it is critical to:

- Develop **criteria** on which to base decisions.
- List the assumptions about the connections between activities and outcomes they are expected to generate.
- Identify any risks associated with the intervention (do-no-harm approach).
- Ask the critical questions: what else do we need to know? What is already in place?

Slide 8: Some possible selection criteria include:

- Community support
- Social acceptability
- Political sensitivity
- Builds on existing capacities and opportunities
- Level of risk
- Required management support
- Sustainability
- Technical feasibility, institutional capacity, and potential for partnering
- Cost effectiveness

This is not a comprehensive list of criteria for selecting interventions, but it is a starting point. Program planners always should consider the assumptions, risks, critical questions, and local context when narrowing down and finally deciding on interventions.

Facilitator: Ask participants if they can think of any other criteria that they may use for selecting interventions.

Slide 9: Assumptions Related to Interventions

There always will be assumptions about the connection between particular activities and the outcomes they are expected to generate. We need to ask the questions:

- What makes us confident that if we implement “intervention X” then “outcome Y” will be achieved as a result?
- What factors that are necessary to achieve “outcome Y,” but outside of project influence, do we assume will remain in place?

Slide 10: Risks Related to Interventions

Risks related to interventions can be directly related to assumptions. For example, what might happen if your assumptions do not hold? Risks additionally include external conditions that have some probability of negatively affecting the link between the intervention and the outcome. Risks also include unintended consequences that result from program interventions, for example, efforts to improve gender equality result in increased domestic violence.

- When selecting interventions, make sure to explore the risk of creating new inequalities, disincentive effects, or other unintended consequences.

Slide 11: Ask Critical Questions

All program design requires consideration of critical questions. **Critical questions** help your team determine the appropriateness of the initiatives you propose. Critical questions differ from assumptions in that they should lead to actions as part of the design.

Some questions will comprehensively ask about the set of initiatives, for example:

- Do interventions fit in with the government's overall development strategy? How do they fit in with donors' strategies? If the proposed initiatives do not fit government or major donor strategies, what approaches will be developed to bring these entities on board?
- Do proposed responses enhance positive livelihood strategies (e.g., asset maximizing or risk reduction strategies), currently implemented by households and communities? Do they fill gaps?

Other questions might be specific to one activity within the program. For example, if you are designing a project to address poor soil health and have determined that a key action will be to plant nitrogen fixing plants, a critical question would be, “Is a steady, and preferably local, supply of seeds for nitrogen fixing plants available?” It is NOT appropriate to list “steady supply of local seeds” as an assumption. The supply either exists or it does not. If it does not exist,

either a different source of seeds must be identified or the project must incorporate plans to fill that gap in the supply chain.

Other examples:

- If land is limited, can livestock activities be implemented and, if so, how?
- How will the project train populations with limited education and literacy?

Facilitator: Direct participants to the Handout 4.2a Critical Questions for Interventions

Additional critical questions to determine the appropriateness of responses include:

- Do proposed responses build on the strengths and opportunities that exist in communities?
- If new initiatives are recommended, does your organization presently have the skilled staff to take on such initiatives? If not, where will the staff and resources come from?
- Are partners needed to implement the project activities? How will these partners be selected? What (if any) additional institutional capacity development is necessary to improve partner performance? What are the constraints to successful partnerships?
- Is there a niche that presently is not filled for which your organization could obtain donor funding? Does this activity fit with your organization's strategic plan or mission?
- Can diverse sectors within your organization work together to address domains of change?

This is not an exhaustive list of questions. Many variables can determine which questions should be asked.

Slide 12: Target Groups

Once we begin to identify interventions, we need to consider the groups that must necessarily be engaged in order to achieve the change desired among the impact population group for outcomes and the goal. For example, to deal with issues of absence of women's rights, groups of men will clearly be part of the target group for various interventions. If the overarching goal is improved childhood nutrition, caregivers of children will have to be targeted for interventions. While target groups may experience positive results, the long-term focus of the TOC should remain on the impact population group. When an intervention is specific to a smaller target group versus the impact group, specify this when describing the intervention output.

Slides 13–14: Inserting intervention outputs in the TOC

After selecting the most appropriate interventions, we must determine the immediate product of each intervention—the output. Frame each output as a result, making sure to identify specific target groups. For example, if we decide that the most efficient, effective way to improve the health and nutritional knowledge of health care staff is by offering them training in growth monitoring and promotion (GMP), community-based management of acute malnutrition

(CMAM), and integrated management of childhood illness (IMCI), our output will be: *community clinic staff trained in CMAM, GMP, IMCI*. Notice how the target group is specified in the output.

The next step is to insert the output into the TOC diagram, using a different color shape, text, or other means to differentiate it from the outcomes.

As always, double-check the causal logic each time there is a new addition to the TOC.

Small Group Activity 4.2

Introduction

This activity gives participants the opportunity to select appropriate interventions for relevant outcomes, frame them as output results, and add them to the TOC diagram.



Estimated duration: 1.5 hours

Learning Objectives

This activity will help participants think critically about the feasibility of implementing the TOC.

Companion Handout

- Handout 4.2a Critical Questions for Interventions

Steps

Instructions:

1. Identify all outcomes in the TOC that require an intervention.
2. Brainstorm potential interventions for these outcomes and use selection criteria (Handout 4.2a) to choose the most appropriate responses.
3. As questions arise that must be answered before determining if intervention is appropriate, note them on the flip charts as “critical questions”.
4. Frame the output of each intervention as a result, making sure to identify specific target groups (e.g., community clinic staff trained in CMAM, GMP, and IMCI).
5. Insert each output into the TOC diagram, using a different color shape, text, or other means of to differentiate it from outcomes.
6. Document any assumptions that affect the output to outcome linkage on the flip chart.
7. Insert any assumption into the TOC using the same color and shape you used earlier for assumptions.

Facilitator: There may not be sufficient time in the workshop for participants to identify interventions for all actionable outcomes in the TOC. If time is constrained, ask the groups to select four or five outcomes that require intervention. Remind the participants that these outcomes must be within the domains of change that the group has agreed their organization will address.

Module 4 Session 3: Refining the TOC

Introduction

In the final stages of the TOC design process, we need to put effort into making the TOC diagram easily readable for those who have not been as close to the process.



Estimated duration:
15 minutes

Companion PowerPoint

A PowerPoint presentation—4.3 Refine TOC—accompanies this lesson as a separate file.

Companion Handout

- Handout 4.3 TOC key

Slides

Slide 1: Make diagram legible

As mentioned earlier, the complex, multi-sectoral, holistic nature of a project TOC, often results in a diagram that will not fit legibly on one page. Use as many pages as needed to convey the level of detail necessary to build a common understanding of how change is expected to occur. You may decide to display each purpose and cross-cutting issue on a distinct page; you may even break it down further and draw a diagram for each sub-purpose. What is most critical is that you keep the model reader-friendly and clearly show pathways of change that extend across separate pages.

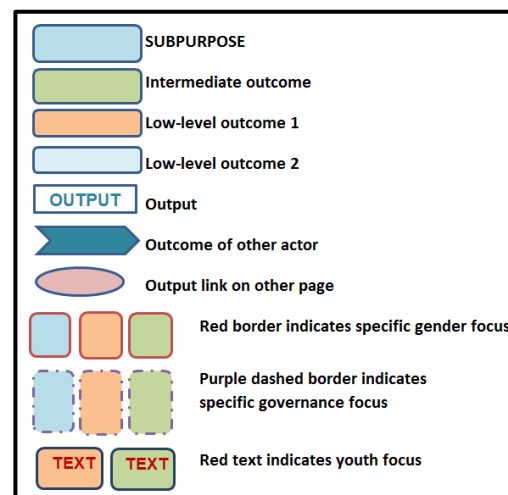
If you are developing the TOC for a FFP-funded project, you will need to submit a single-page, all-inclusive TOC, in addition to the detailed diagrams. One way to offer an all-inclusive model is to display the following in the diagram:

- all purposes and sub-purposes.
- a pared-down set of boxes that collectively represents all the outcomes for which you provide detail on individual pages.
- notes directing the reader to detail on individual pages.
- the outputs that will catalyze the change process.

Slide 2: Differentiate TOC components

Use distinct colors, shapes, borders, text, and other graphic elements to differentiate TOC components. Be sure to include a key that describes the coding. Handout 4.3 offers some examples, but these are not hard-fast rules. Code in a way that makes sense for your TOC model.


If you are developing the TOC for a FFP-funded project, it can be very helpful to shade each outcome level a different color. In addition to aiding communication, shading by levels makes it easier to transfer the TOC to a logframe. To do this start by shading the domains of change (purposes) a distinct color. Next shade only the outcomes that directly feed into the purposes (an arrow directly links them). Then move to the next level, and repeat. Because a TOC is not a linear model, do not be surprised if the various levels do not line up horizontally the way they might in a results framework. What is most important is the order of arrows that connect each component, not the physical space (high or low in the model) where a component is located.

Handout 4.3

Small Group Activity 4.3

Introduction

In this activity, participants will use distinct colors, shapes, borders, text, and other graphic elements to differentiate TOC components and create a key that describes the coding.

 **Estimated duration:**
45 minutes

Learning Objectives

This activity will help participants make the TOC diagram more legible for readers who have not been involved in the development.

Companion Handout

Instructions for Activity 4.3.

Instructions:

1. Make sure each level of the TOC is shaded a distinct color.
2. Make sure outcomes produced by other actors, assumptions, and rationales stand out in shape and or color.
3. Make sure linkages across TOC pages are clear.
4. Use shading, borders, text or other graphic elements to highlight any other distinct features in the model.
5. Create a key for all color and shape coding.

Works Referenced in Module 4

Module 4 content draws heavily from the following module in a distance learning course created by TANGO International for Florida International University/USAID Office of Foreign Disaster Assistance:

Starr, L., S. Nelson, and T. Spangler. 2013. *Livelihoods and Disaster Risk Reduction*. Module 3: Program Design. TANGO International and Florida International University.

The Food Security and Nutrition Network Monitoring and Evaluation Task Force. 2015. *Monitoring and Evaluation Facilitator's Guide*. Washington, DC: The TOPS Program.

Additional Resources to Guide Intervention Selection

Maxwell, D. and H. Stobaugh. 2012. *Response Analysis: What Drives Program Choice?* Feinstein International Center. Available at: fic.tufts.edu/publication-item/response-analysis-what-drives-program-choice/

Oxfam. 2008. *Rough Guides to Emergency Food Security & Livelihoods Programmes: Response Analysis*. London: Oxfam GB.

Stern, M. L. Jones-Renaud, and M. Hillesland. 2016. *Intervention Guide for the Women's Empowerment in Agriculture Index (WEAI)*. Washington, DC: ACDI/VOCA and USAID.

USAID. 2013. *Land Tenure and Property Rights. Situation Assessment and Intervention Planning Tool*. Available at: www.usaidlandtenure.net/sites/default/files/USAID_Land_Tenure_Situation_Assessment_and_Intervention_Planning_Tool.pdf (Recommended excerpt: Chapter 5.)

End of Module 4

Module 5: Making the Theory of Change Testable & Using the Theory of Change

About Module 5

Overview

Module 5 builds on previous modules. Module 1 provided an overview of the theory of change (TOC) process, and introduced the dataset that provides the foundation for the remainder of the training. In Module 2, participants practiced using causal analysis to create a problem tree. In Module 3, the focus shifted to solutions, including drafting a long-term goal, drafting outcome statements, identifying assumptions and articulating rationales. In Module 4, participants identified domains of change and pathways of change and identified specific project interventions that will set the wheels of change in motion. We are nearing the end of the process now. Final steps include 1) making the TOC testable by selecting indicators that tell us how success will be recognized at each step in the pathways of change, 2) drafting a TOC narrative, and, 3) if implementing a FFP-funded project, transferring the TOC to a logframe.

The purpose of Module 5 is to provide closure to the process of developing a TOC. Final steps will be discussed, along with a plenary session to discuss how participants plan to use a TOC in their daily work throughout the program cycle.

The objectives of Module 5 are to help participants:

- Identify effective indicators for each outcome in the TOC.
- Learn how the TOC can be transferred to a logistical framework (logframe) if necessary.
- Understand what should be included in the TOC narrative.
- Reflect on how the TOC can be used to reflect, learn and adapt within the program cycle.


Structure and Workload

Module 5 is composed of three facilitator-led presentations. The module's specific set of objectives are reinforced through interactive plenary sessions, group activities and presentations, and Q&A with the facilitator.

Module 5 Session 1: Indicators and TOC transfer to Logframe

Introduction

Once we have a plausible and feasible TOC in place, we need to make sure it is testable. Identifying indicators for each outcome gives us a way to recognize that change has occurred.

 **Estimated duration:**
30 minutes

Learning Objectives

Session 5.1 will help participants understand criteria for selecting effective indicators for each incremental outcome, and learn how a TOC can be transferred to an M&E logframe.

Companion PowerPoint

A PowerPoint presentation—5.1_Indicators_logframe—accompanies this lesson as a separate file.¹⁸

Companion Handouts

The following printed handout is provided along with the lesson.

- Handout 5.1a Indicators

Four additional resources are available on the USB:

- Handout 5.1b What are Indicators?
- Handout 5.1c USAID TIPS performance indicators
- Handout 5.1d USAID FFP baseline final indicators
- Handout 5.1e USAID FFP annual monitoring indicators

Slides

Slide 2: The TOC Process

The TOC roadmap appears in every session as a means to orient participants about where they are in the process.

Slide 3: Indicators

Indicators are signposts of change. An indicator is a quantitative or qualitative variable or criterion that measures one aspect of a program/project: an indicator verifies whether an intended change actually occurred.

¹⁸ The most current PowerPoint slides and handouts can be found at www.fsnnetwork.org/theory-change-training-curriculum.

Indicators tell us how success will be recognized at each step in the pathway of change, thus verifiable indicators for each outcome should be defined in great detail. Essentially, you need to take an abstract concept (each outcome) and define it in a way that research teams can gather data and track progress on the extent to which the program is reaching the outcome. For example, an indicator of “Improved access to diverse and quality foods” is “Prevalence of children 6 to 23 months of age are receiving a minimum acceptable diet.”

Slide 4: Indicators in the TOC

Indicators will not be added to the TOC graphic, but each domain of change, outcome and output represented in the model will need an indicator. Once selected, TOC indicators will be documented in the logframe.

For FFP-funded projects, start by reviewing the required FFP indicators (handouts 5.1d and 5.1e on the USB) to explore how they might overlay your TOC diagram.

Slide 5: Types of Indicators

An **impact indicator** measures the highest level of change your project is responsible for bringing about. An **outcome indicator** measures the change in systems or behaviors. **Output indicators** measure implementation. They track the goods and services produced by the program activities.

Slide 6: Level of Indicators

The graphic on **slide 6** presents the TOC levels at which indicators are placed. Impact indicators are at the top, equal to the desired goal, and at times the domains of change/purposes. Outcome indicators fall below this, in line with the domains of change, and various high and lower-level outcomes determined along pathways of change. Output indicators correspond to the products of interventions, which are located on the lowest level of the TOC.

Slide 7: Characteristics of Good Indicators

Ideal characteristics of indicators:

- **Measureable:** Indicators should be measurable by the use of specific quantifiable variables and/or through other factual, objective evidence obtained through qualitative methods.
- **Technically feasible:** The indicators should be capable of being assessed or measured with the skills available.
- **Reliable:** Conclusions based on these indicators should be verifiable or objective if measured by different people, at different times, and under varying circumstances.
- **Valid:** Indicators should be capable of measuring the phenomena.
- **Relevant:** Indicators should apply to project objectives at the appropriate level in the hierarchy.
- **Sensitive:** They should be sensitive to changes in the situation being observed.

- **Cost-effective:** Information obtained should be worth the time and money involved to procure it.
- **Timely:** It should be possible to collect, analyze, and report the data in a reasonable period of time.

Slide 8: Criteria for Deciding WHAT to Measure

When deciding what to measure, program planners should consider the following.¹⁹

- **Progress toward final goal and domains of change:** While we want an indicator for every outcome, we should identify indicators that will provide the most clear and direct information for demonstrating that the outcomes have been reached.
- **Data that have the most potential to redirect action:** identify indicators that will enable a continual review of changes in TOC dynamics, such that programs can reevaluate and/or affirm implementation activities.
- **Balance needed information versus useful information:** Make sure selected indicators actually measure something that can reliably be used to demonstrate progress toward outcomes. While certain information may be useful for program planning, it may not be the type of information that is needed to determine whether an outcome is achieved.
- **Balance the need to know versus the ability to find out:** In order to measure progress, evaluators must actually be able to collect data on the chosen indicators. If the indicator is presented in a way that makes collecting the data too difficult, determining the progress of an initiative may be halted or stopped.
- **Context of the situation, problem, and underlying causes:** Indicators should be appropriate and relevant to the cultural, socioeconomic, and geographic context.

Slide 9: Indicator Examples

Examples of Relevant FFP Indicators

Purpose/Outcome	Indicator
Reduced malnutrition in vulnerable populations	Prevalence of underweight children under 5 years of age
Improved agricultural productivity	Gross margin per unit of land, kg, or animal of selected product
Improved market efficiency	Kilometers of roads improved or constructed
Improved access to diverse and quality foods	Dietary diversity score

Slides 10-16: Transferring the TOC to the Logframe

This set of slides first distinguishes TOCs from logframes and then shares some helpful help you summarize the TOC in the logframe. Although transferring a systems-thinking model that

¹⁹ Caldwell, R., and S. Sprechmann. 1997.

demonstrates multiple examples of cross-cutting causal logic into a structured, linear matrix may seem like stuffing an octopus into a pigeonhole, there are a few simple steps you can take to make this transfer easier.

Slide 11: Theory of Change versus Logframe

A logframe is different from but complementary to a TOC. A logframe summarizes the TOC in a matrix or table format. The logframe includes specific objectives related to project activities, as well as the outputs, outcomes, and indicators with targets, connected to those objectives.

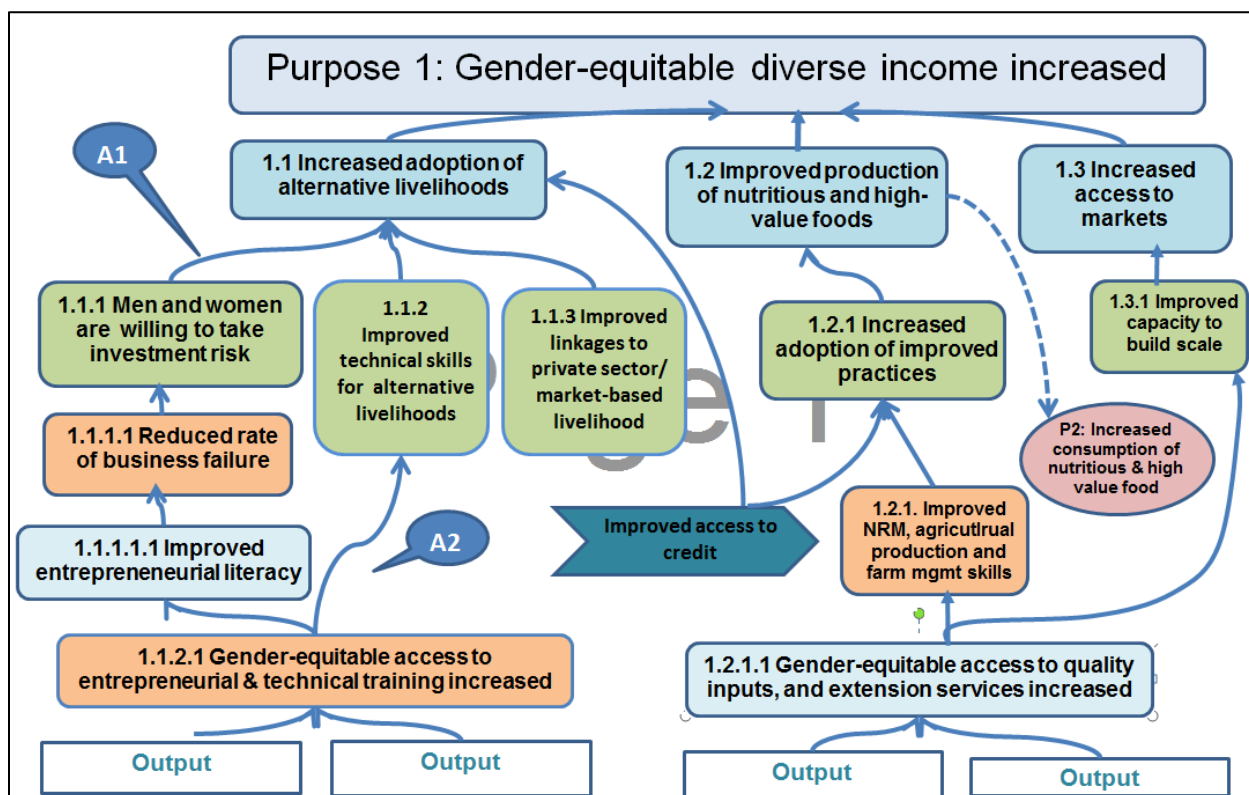
Key differences between a TOC and a logframe include:

- A TOC provides a broad view of a problem, including all the domains and pathways of change that may help reach a long-term goal. It is non-linear, with many cross-sectoral linkages, and can be adapted to changing circumstances. A logframe is based on a specific intervention or set of activities; it only includes outcomes that a project is directly responsible for. It is linear and structured and typically does not change.
- A TOC describes the conditions required to reach a higher goal or outcome, along with the assumptions and rationale for the linkages along a causal pathway that often has many cross-sectoral linkages. A logframe describes outcomes, indicators with targets, and potential data sources for each indicator in a standard, structured matrix.
- A TOC is used to understand a situation and to look at the big picture and all the interconnected influences. It is an excellent tool to help project teams, reflect, learn and adapt activities. A logframe is used mainly for accountability. It is a tool that allows projects to show donors how they will track performance.

Slides 12-15: Transferring the TOC to the Logframe

Slide 12 demonstrates FFP's expectations of how elements of a TOC are transferred to a FFP logframe.

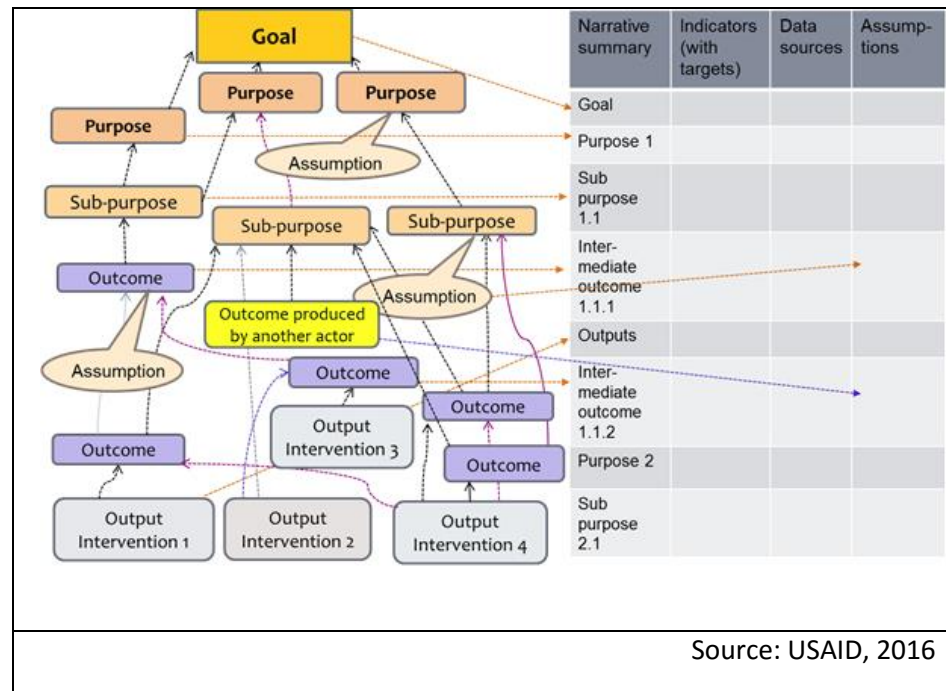
Slides 13-18 explain helpful tips for executing this transfer. The first step is simply to save an electronic copy of the TOC, specifically for the purpose of numbering outcomes using a logframe format (1.1, 1.2, 1.3, etc.). Start with one Purpose and number only the outcomes that directly feed into that purpose (those linked by an arrow) these outcomes will become sub-purposes. Then move to the next level below—number only the outcomes that directly feed into one sub-purpose, and then repeat the process for each sub-purpose. Because a TOC is not a linear model, do not be surprised if the various levels do not line up horizontally the way they might in a results framework. What is most important is order of arrows that connect each component, not the physical space (high or low in the model) where a component is located.



Do not number outcomes produced by other actors. You will not be monitoring those outcomes in the same way you will track outcomes produced by the project. Actually, outcomes produced by other actors become assumptions in the logframe. This will be explained shortly.

Often one outcome feeds into several outcomes above it. Numbering these 'multiple contributors' using a logframe format can be confusing. Try to reach consensus among your team about which outcome stream a 'multiple pathway contributor' primarily contributes to and number it accordingly. If all things are equal, you'll simply need to pick one path or the other. You will have the opportunity to note the multiple pathway contributions in logframe notes.

Once all the levels of the TOC are numbered, begin to enter the TOC components into the logframe in the same hierarchy as they are displayed in the TOC. If there is an assumption influencing an outcome link, enter it in the logframe row that corresponds to the lower level outcome.



Once the entire pathway of change that explains Purpose 1 is entered in the logframe, move on to Purpose 2, following that pathway all the way down from Purpose 2 to related outputs.

Outcomes produced by other actors are also entered as assumptions, because we assume (based on credible data sources) that the other actor will be successful in achieving this outcome (e.g., Feed the Future efforts will increase market access as projected). A project may do its best to influence the other actors' achievement, but ultimately, it is out of project control. Similar to other assumptions in a TOC model, outcomes produced by other actors are necessary to achieve project results. As such, it is advisable to develop a plan to coordinate with the efforts of other stakeholders to track progress on these outcomes via continuous discussion, even though your project will not be directly involved in implementation.


Summary of Key Concepts

- Indicators are critical to the TOC because they give us a measure of achievement toward outcomes and goals.
- Like all parts of the TOC, indicators must be carefully weighed against criteria and critiqued to ensure they are indeed useful.
- Projects should define at least one indicator for every component of the theory of change.
- The TOC and a logframe are distinct, but complementary tools for project design, monitoring, and evaluation.

Small Group Activity 5.1

Introduction

This activity gives participants the opportunity to identify indicators for components in the TOC and to transfer a TOC to a logframe.

 **Estimated duration:**
2 hours activity
30 minutes group presentations

Companion Handouts and Tools

- Instructions for Activity 5.1
- Tool 5.1 logframe is located on participant's USB drive

Steps

Instructions

Numbering TOC and Transferring to Logframe (2 person team)

Numbering

1. Save a copy of the TOC and label it TOC_with_logframe#.
2. Start with one purpose and number only the outcomes that directly feed into that purpose.
3. Then move to the sub-purpose level. Number only the outcomes that directly feed into one sub-purpose.
4. Do not number outcomes produced by other actors.
5. Repeat the process for each sub-purpose until all outcomes that the project will produce in the Purpose 1 pathway of change are numbered.
6. If time, repeat steps 1 through 3 for each Purpose.
7. When one outcome contributes to multiple levels above it, try to reach consensus among your team about which outcome stream it primarily contributes to and number it accordingly. If all things are equal, pick one path or the other. You will have the opportunity to note the multiple pathway contributions in logframe notes.

Transferring

8. Open Tool 5.1 on your USB.
9. Begin to enter the TOC components into the logframe in the same hierarchy as they are displayed in the TOC. Use the exact same wording.
10. When the entire pathway that explains Purpose 1 has been entered, then move on to Purpose 2, following that pathway all the way down from Purpose to Output.
11. Enter assumptions in the last column of the logframe. In the TOC model, assumptions are positioned between a precondition and an outcome above it. Enter an assumption on the same logframe row as the precondition it is linked to.

12. Enter outcomes produced by other actors as assumptions in the logframe.

13. For outcomes that contribute to multiple levels above, make a small note in the Narrative column. For example,

1.1.2. Gender-equitable access to entrepreneurial & technical training increased (*also contributes to 1.1.1.1*)

Selecting indicators (3-4 person team)

1. Choose one pathway and determine how success will be measured for each step.
2. First select existing FFP indicators that could apply to outcomes in the TOC. Reference Handouts 5.1d and 5.1e.
3. Use Handouts 5.1a, 5.1b, and 5.1c as guides to craft strong indicators for outcomes that do not have an appropriate FFP indicator. Make sure to identify the target population for the indicator if they differ from the impact population.
4. Coordinate with the logframe team to enter indicators in the last column of the logframe.

Presentation

Facilitator: Select two groups to present their complete TOC graphic model and logframe.

Works Referenced in Module 5

The Food Security and Nutrition Network Monitoring and Evaluation Task Force. 2015. Monitoring and Evaluation Facilitator's Guide. Washington, DC: The TOPS Program.

USAID Bureau of Democracy, Conflict, and Humanitarian Assistance Office of Food for Peace. 2016. *Technical Reference for FFP Development Food Assistance Projects*. Washington, DC: USAID.

Resources to Guide Indicator Selection

USAID Bureau of Democracy, Conflict, and Humanitarian Assistance Office of Food for Peace. 2015. *FFP Indicators list*. Washington, DC. Available at: www.fsnnetwork.org/usaaid-office-food-peace-ffp-indicators


USAID Bureau of Democracy, Conflict, and Humanitarian Assistance Office of Food for Peace. 2015. FFP Indicators Handbook. *Part I Indicators for Baseline and Final Evaluation Surveys*. Washington, DC. Available at: www.fsnnetwork.org/usaaid-office-food-peace-ffp-indicators

USAID Bureau of Democracy, Conflict, and Humanitarian Assistance Office of Food for Peace. 2015. FFP Indicators Handbook. *Part II Annual Monitoring Indicators*. Washington, DC. Available at: www.fsnnetwork.org/usaaid-office-food-peace-ffp-indicators

Module 5 Session 2: Theory of Change Narrative

Introduction

This session describes what should be included in the TOC narrative—the final component of the TOC product, which communicates information that is not easily interpreted from the TOC conceptual graphic.²⁰

 **Estimated duration:**
15 minutes

Learning Objectives

This session will help participants to recognize what should be included in the TOC narrative.

Companion PowerPoint

A PowerPoint presentation—5.2 TOC Narrative—accompanies this lesson as a separate file.²¹

Slides

Slide 2: The TOC Process

The TOC roadmap appears in every session as a means to orient participants about where they are in the process.

Facilitator: Explain that there is not time to draft a narrative in this workshop. The session is purely informational.

Slide 3: What is the Purpose of the TOC Narrative?

The purpose of the TOC narrative is to explain information to users that is not easily communicated in a graphic. Use the narrative to convey the degree of certainty that change will unfold as depicted in the TOC diagram and to outline conditions that could threaten progress along the pathways of change. Do not use the TOC narrative to summarize what is obvious in the TOC diagram.

Slides 4-7: What to include in the TOC narrative

This set of slides outlines USAID FFP guidance from pages 4-17 of the 2016 *Technical Reference for FFP Development Food Assistance Projects*.

What to include in the TOC narrative:

- Text with web links or references to evidence that supports connections between outcomes.

²⁰ This session draws heavily from guidance in the 2016 *Technical Reference for FFP Development Food Assistance Projects*. Chapter II Mandatory Program Design Elements, pages 4-17, by USAID Bureau of Democracy, Conflict, and Humanitarian Assistance Office of Food for Peace.


²¹ The most current PowerPoint slides and handouts can be found at www.fsnnetwork.org/theory-change-training-curriculum.

- Articulation of rationales.
- Explanation of project assumptions that are not immediately obvious.
- Identification and clarification of the role of other actors:
 - Scale of other actors interventions relative to project coverage.
 - Likelihood other actors will achieve necessary outcomes.
 - Risks to the project if other actors do not achieve outcomes.
 - Project level of collaboration with actor.
- Description of how necessary outcomes and outputs produced by other actors will be monitored.
- Explanation of project assumptions about how targeting a limited number of direct participants will result in population-level changes.
- Implementation details for activities to promote knowledge and practice among non-participants.

Module 5 Session 3: Using the Theory of Change Throughout the Project Cycle

Introduction

This final session discusses a few ways we can use this valuable product throughout the project cycle. Finally, in this session, participants will explore how they envision using a TOC in their daily work.

 **Estimated duration:**
30 minutes

Learning Objectives

This session will help participants to understand how the TOC will be used at various stages in the program cycle

Companion PowerPoint

A PowerPoint presentation—5.3 Using the Theory of Change—accompanies this lesson as a separate file.

Slides

Slides 2-3: How do we know if the theory of change is adequate?

A TOC is adequate when it provides a logical and coherent explanation of how the major underlying barriers to change are to be addressed and when it specifies the major required areas of change with special attention to the structural dimensions.

The change demonstrated in the model must be:

- **Plausible:** It can be explained logically, follows a clear flow from the underlying causes to the long-term goal, and shows the major areas of change needed.
- **Feasible:** Identifies realistic means of initiating change.
- **Testable:** Clearly outlines how change will be measured.

Slides 4-5: What Next?

How do we make sure that creating a TOC is not just an exercise to satisfy the donor? How can we use the TOC to stimulate processes that engage staff? How can we encourage staff to continue to use the TOC model throughout the program cycles as a tool for learning, reflecting, and adapting?

After creating the TOC diagram, plan to use the TOC as the foundation for program design, implementation, and evaluation. Use it throughout the project cycle as a tool for learning, reflecting, and adapting. And finally, be sure to refine the TOC on an annual basis, as you learn more about the processes of change in an implementation area.

Slides 6-9: Using a Theory of Change to Learn, Reflect, & Adapt in the Design Phase

Slide 6: TOCs should form the foundation of project strategies and design. Similar to other development hypotheses, TOCs create the vision for change and communicate the need for change. In many cases a TOC is better able to articulate the specifics of how change will occur than models such as a results framework. The combination of visual representation of the anticipated sequence in which change will occur, and visual representation of all of the factors that need to come together in order for change to occur, all based on a clear and testable set of hypotheses, results in a stronger communication tool.

Slide 7: Because a TOC contains outcomes produced by other actors it is critical to work toward common understanding with other stakeholders on shared values, strategies, and systems. We can use the TOC to gain agreement among stakeholders about what defines success and what it takes to achieve it. A TOC can help to demonstrate that all steps in the pathway are vital and in optimal conditions should be addressed in a unified manner.

Slide 8: Even among the outcomes a project agrees to address, every organization will have gaps or weaknesses in some area. This is okay! One organization does not have to accomplish everything. Identifying gaps and weaknesses helps an organization recognize where it needs support to achieve the long-term goal in the TOC.

To identify potential partners, remember to think “outside the box.” While some organizations have a history of working closely with others, this part of the process allows us to expand the pool of potential partners. Program planners should not limit potential partners to people or organizations they have worked with in the past. Of course, the final determination may indeed be a familiar partner organization, but the key is to think about what partner has the best set of abilities, skills, knowledge, and experience to best support the TOC.

Slide 9: The TOC helps identify the most critical and strategic interventions and helps determine the sequence in which they should occur. In poorly-design projects, certain initiatives may be a

part of the strategy because an organization has strong capacity in this area, or because there is sectoral competition for and distribution of funds, or because a certain type of intervention is trending. A project design based on a vetted TOC keeps us practical when choosing interventions. If there is not a logical link between an intervention and an outcome in the TOC, it does not belong in the project design.

Having a TOC model that shows where an organization's efforts fit within the big picture keeps us realistic when setting performance targets. It allows us to reflect on how much change can we expect to see over the life of program. The extent of change we can expect to achieve will be influenced by efforts of other stakeholders.

Slides 10-11: Using a Theory of Change to Learn, Reflect, and Adapt in the Implementation Phase

Slide 10: Use the TOC to determine the sequencing of activities. The model provides the logic for starting certain activities first, implementing certain activities consecutively, and others simultaneously.

Slide 11: The TOC should be an integral part of your M&E system. Similar to other logic models, a TOC provides a blueprint for evaluation that identifies measurable indicators of success. In the implementation phase, you need to operationalize the indicators you defined during TOC design. You may need to measure indicators annually or more frequently, depending on the type. Similarly, you will likely need differing data collection systems for the various indicators.

Keep a large copy of the TOC available for staff to provide a visual representation of what is changing and what is not yet changing. This allows a team to see why a project may be having problems achieving higher-level outcomes.

The TOC process requires that performance management systems accommodate uncertainty and flexibility. Think of the TOC as your evolving guide for implementation and M&E, rather than an indelible prescription.

Slide 12: TOCs can and should be revised periodically as organizations learn more about their operational context. For example, a TOC may need to be revised as a result of good monitoring and ongoing formative research. During implementation, you will have the opportunity to learn more about the institutional and policy environment, gender dynamics, value chains and markets, or how people manage stress, among other areas. As you learn more about barriers and enablers to change you may need to modify the causal linkages and pathways in your TOC diagram. In another example a TOC might need to be revised due to a significant change in contextual conditions such as an Ebola outbreak, an earthquake, the start or demise of government vaccination programs, government input subsidies, etc. When one part of the TOC is affected, you must revisit all pathways, because all factors are interrelated.

There are many benefits to revising a TOC during the implementation phase. Projects can adapt based on learning, can become more innovative in response to dynamic contexts, and can promote implementation that supports an emergency – development continuum.

Slide 13: Using a Theory of Change to Learn, Reflect, and Adapt in the Evaluation Phase

The TOC should be the foundation for developing key questions for final evaluations. The model will outline key hypotheses and assumptions that should be explored. If a project experiences success, the TOC can be used to demonstrate a definitive link between outcomes program activities. If a project is unsuccessful, use the TOC to help understand whether the theory or implementation was poor. Finally, use the TOC to reflect on how program-inspired change was linked to and contributed to wider contextual change.

Slide 14: Discussion

Facilitator: Guide a discussion asking participants how they intend to use the TOC process and product in their daily work. Call out the different professional sectors in the workshop (e.g., program development staff, project managers, M&E and other technical specialists, knowledge management, and business development staff) to share their unique thoughts.

Following this discussion, reconvene the entire group for a wrap-up and final thoughts on the course.

Works Referenced in Module 5

Caldwell, R., and S. Sprechmann. 1997. DM&E Workshop Series: Volume 2: Facilitator's Manual. Geneva, Switzerland: CARE International.

The Food Security and Nutrition Network Monitoring and Evaluation Task Force. 2015. Monitoring and Evaluation Facilitator's Guide. Washington, DC: The TOPS Program.

USAID. 2010. *Theories of change and indicator development in conflict management and mitigation*. Washington, DC: USAID.

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End of Module 5